

ANNUAL REPORTS

FOR 1896,

TO THE FOLLOWING DISTRICT COUNCILS :

DONCASTER BOROUGH.

DONCASTER RURAL.

GOOLE RURAL.

GOOLE URBAN.

RICCALL RURAL.

SELBY RURAL.


SELBY URBAN.

TADCASTER RURAL.

BALBY AND HEXTHORPE URBAN.

J. MITCHELL WILSON, M.D., D.P.H., Cambs.

MEDICAL OFFICER OF HEALTH.



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POPULATION AREA.

SUMMARY OF BIRTH AND DEATH RATES

IN EACH DISTRICT DURING 1896.

NAME OF DISTRICT.	POPULATION.	AREA IN ACRES.	RATES PER 1,000 OF POPULATION.		
			BIRTHS.	DEATHS.	ZYMOTIC DISEASES.
DONCASTER BOROUGH	28,757	1,629	30·6	16·7	1·6
DONCASTER RURAL... ..	28,600	99,622	35·0	16·7	1·3
GOOLE RURAL	8,318	38,238	32·2	18·0	1·0
GOOLE URBAN	17,500	1,332	36·2	15·8	2·3
RICCALL RURAL	3,126	16,735	28·7	17·5	0·3
SELBY RURAL... ..	5,950	34,726	26	13·8	0·5
SELBY URBAN... ..	6,250	3,757	29·0	18·2	4·0
TADCASTER RURAL... ..	27,430	72,865	31·2	17·7	1·4
BALBY AND HEXTHORPE URBAN	5,300	1,613	36·0	13·0	1·9

Borough of



Doncaster.

DONCASTER URBAN SANITARY AUTHORITY

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year ending 31st December, 1896.



DONCASTER :

EDWARD DALE, ROYAL PRINTING WORKS, CLEVELAND STREET.

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1897.

DONCASTER URBAN SANITARY AUTHORITY.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year ending 31st December, 1896.

POPULATION CENSUS, 1891	...	...	...	25,954
ESTIMATED POPULATION DURING 1896	...			28,757
PART ESTIMATED AS BUILT UPON, IN ACRES				1,629

TO THE DONCASTER SANITARY COMMITTEE.

GENTLEMEN,

I have now to present to you my annual report for 1896.

Basing the rate of increase on the same proportion as was Population. found to prevail during 1881-90, I have estimated the population in the borough to the middle of last year as 28,757.

The estimated population in the separate wards is in part based upon the increase of new houses during the year.

The number of births registered in 1896 was 881—males Births. 475, females 406. The birth rate for the year was 30·6 per 1,000; the average birth rate for the previous 10 years in

Doncaster was 32·5. In England and Wales the birth rate in 1896 was 29·7, and the Registrar General states "that it was lower than the rate in any other year on record excepting 1894, and that it was 1·3 per 1,000 below the mean rate in the 10 years 1886-95."

The following were the birth rates in the wards of the town.

Central Ward	...	...	21·0	per 1,000.
East	„	...	20·0	„
North	„	...	39·0	„
South	„	...	35·6	„
St. George's	„	...	30·0	„
West	„	...	36·7	„

Deaths.

Four hundred and eighty-five deaths were registered last year—males, 273 ; females, 212. Among these there were 155 deaths of those who died at the Infirmary, or the Workhouse, and did not belong to Doncaster, these are deducted ; but 11 deaths which occurred at Carr House Hospital are added, the corrected return for the year was therefore 481, and the death rate was 16·7 per 1,000. The mean rate for the previous 10 years was 19. In England and Wales the death rate for 1896 was 17·1 ; compared with the rate for the previous 10 years there was a decrease in the whole country of 1·7 per 1,000. 1896 may therefore be considered as having been an exceptionally healthy year, and it is satisfactory to note that in Doncaster the reduction in the year's death rate was greater than that which is reported for England and Wales.

In the Central Ward the death rate was 19·7.

„ East	„	„	„	15·4.
„ North	„	„	„	16·4.
„ South	„	„	„	15·8.
„ St. George's	„	„	„	17·4.
„ West	„	„	„	15·1.

Deaths from Zymotic Diseases.

When we examine the causes of deaths in several groups, there is a noticeable reduction in each. First from zymotic or infectious diseases there were 46 deaths, including those which occurred at Carr House ; there were 80 during 1895.

Last year 14 were caused by whooping cough.

„	11	„	„	scarlet fever.
„	11	„	„	diphtheria.
„	5	„	„	enteric fever.
„	3	„	„	diarrhoea.
„	2	„	„	membranous croup.

The death rate from these was 1·6 per 1,000; the 10 years' mean rate in Doncaster was 2·2, in England and Wales last year it was 2·1.

Table I. shows that the death rate in this group was only one half the general rate in the West Ward, and that that rate was exceeded in the Central and East Wards.

There were 27 deaths from phthisis or consumption, equal to 0·9 per 1,000, from other forms of disease of the lungs there were 83; together these equalled a death rate of 3·8 per 1,000, while the average is 4·6; the difference means that 22 fewer deaths than the average number were registered last year from diseases of the lungs.

The proportion of infants who died was 139 per 1,000 registered births, there was a very considerable reduction in this group, for the average is 170; in England and Wales last year the proportion was 148 deaths for every 1,000 births. In this calculation there is no question of the accuracy of the estimate of the population to be considered, as it is a simple comparison of the births and the deaths of infants registered during the year. It is therefore one test of the sanitary condition of the district and its effect upon young children. The following is the comparison with the several wards:—

The deaths under one year in the whole town were 139 per 1,000 registered births in the

Central Ward they equalled 99.

East „ „ 143.

North „ „ 100.

South „ „ 164.

St. George's Ward they equalled 176.

West ,, ,, 100.

Forty-nine per cent. of all the deaths registered were of children under five years of age, while 21 per cent. were of persons who had reached or lived beyond 65 years.

Thirty-four deaths were registered on the coroner's certificate, 18 of these were returned as due to natural causes, 16 were caused by accidents or suicide. Every death was either certified by a medical attendant or by the coroner.

Cases of
Infectious
Diseases
Notified.

During 1896 there were 431 cases of infectious diseases notified, a lessened number when compared with the returns of 1895.

322 were cases of scarlet fever.

31 ,, ,, diphtheria.

22 ,, ,, enteric fever.

53 ,, ,, erysipelas.

2 ,, ,, puerperal fever.

1 was certified as membranous croup.

Scarlet Fever. Of the 322 cases of scarlet fever reported 11 died, the death rate was therefore 3·4 per cent. of the persons attacked; among the cases treated at the hospital the death rate was less than that for all the cases, as it was just under 3 per cent. The outbreak was, therefore, of a mild type, and a large proportion of those attacked recovered. But the mild nature of the illness caused many cases either to be overlooked or to be thought too little of, and in spite of the large numbers notified there were others which were never suspected until 2 or 3 children in the family were found to be ailing with the same symptoms. From 36 houses there were at least two cases reported from each within 10 days of each other; there is no doubt these were cases of home infection, and probably the mother was ignorant of what the illness was until a doctor was called in. There were a few even worse cases where 3 and 4 were reported at once with the remark that "one of the cases was freely peeling." These are a few of the facts about

unexpected cases which were discovered, but it is only reasonable to believe that the same cases were as likely to be the cause of many others, outside these homes. From 19 houses 62 cases were removed to the hospital after a second or third person had become infected in the same house. In the great majority of these, after cleansing and disinfecting the rooms, there were no more cases. But there were exceptions, where, owing to the small amount of bedroom accommodation, or where the patients had been nursed in the kitchen, no real disinfection could possibly be carried out, and so new cases were reported again and again from a few such houses.

Again we have had to remove fresh cases from some houses where there have been doubts if the infection was caused by imperfect recovery of the case discharged from the hospital, or was a new and independent infection. These cases have each been anxiously investigated.

But there were 40 per cent. of all the cases left to be nursed outside at their own homes, even when 2 and 3 of the family were ill. Promises are made to keep the sick child from the others; after the second week with the patient evidently well—although in a highly infectious state—the restraint is lessened, and other cases are then reported to us from the same house.

These are some and the chief reasons for the continued prevalence of the outbreak of scarlet fever during the last 2 years, but we confidently look for more co-operation from the parents in our efforts to protect their own and their neighbours' children against the spread of infection.

Thirty-one cases of diphtheria were notified, and 2 of Diphtheria. membranous croup, among these 33 cases there were 13 deaths, amounting to 40 per cent. of the persons attacked. 11 of the fatal cases were children under 5 years of age, 6 of the cases were removed to the hospital, 5 of them recovered. The prevalence of the disease was very irregular throughout the year: 11 of the cases occurred in January and February, in August there

were 3 cases, in October 5, and in November 3, in the other months there were never more than 2 cases reported.

Three of the cases occurred in houses during the prevalence of scarlet fever among others in the same family. In only one house did the infection spread until 3 were attacked. The history of several seemed to be of illness beginning as a supposed cold, and medical aid only called in when serious symptoms developed. Hence in 3 cases the child died before any report was received of the case.

The treatment of this disease by the anti-toxin serum has been tried in a few of the reported cases, but the hope of success by that method is chiefly among those treated in the early stages of the disease.

Fifteen of the cases were among children under 5 years of age, 10 were between 5 and 15 years, and 8 cases were of adults. From the inquiries made at the several houses, I very much doubt whether the serious nature of these diseases of the throat, and the need there is for obtaining medical aid in the early stages, is sufficiently considered. Last year 40 per cent. of the sufferers died, and that fact is a sufficient reason for drawing attention to anything that hinders the prevention of the disease. Badly trapped or undisconnected drains were found at several of the houses, and these defects probably helped to set up the severe form of the illness.

Enteric or
Typhoid Fever.

Twenty-two cases of enteric or typhoid fever were notified, among these there were 5 deaths, equal to 22 per cent. of the persons attacked. 5 of the patients were under 14 years of age, and 17 were adults. One half of the cases notified were removed to the hospital.

August was the only month when more than 3 cases were reported. Again a large number of cases occurred in the South Ward, but the inquiries made showed that the illness of 3 of these was not contracted at their homes. In only two houses did a second case of this fever occur, but unless some of the cases had

been removed from houses where there were many inmates, and also from amid unsanitary surroundings, there would probably have been more such cases to report.

Following upon the outbreak of measles in the previous year, many children were last year attacked with whooping cough from that very infectious disease 11 young children died.

I have already reported that cases of scarlet fever, enteric fever, and of diphtheria were treated in Carr House Hospital.

There were admitted 192 cases of scarlet fever (6 deaths).

“ “ “ 12 “ enteric fever (4 deaths).

“ “ “ 7 “ diphtheria and membranous croup (1 death).

Seventeen additional cases of scarlet fever were patients from the the districts outside the borough.

At the request of the Sanitary Committee, inquiries were made as to the charges made for the treatment of patients in hospitals for infectious cases in other towns. After considering the replies, the Committee decided to recommend that in future no charge be made to persons residing within the borough for maintenance and nursing at Carr House Hospital, but that, if special accommodation is wanted, a charge be then made.

In addition to removing the large number of persons treated at Carr House, the disinfection of the houses where the infectious cases were reported, and the stoving of nearly 2,000 articles of clothing, bedding, etc., have formed part of the hospital caretaker's work.

The inquiries made at the houses where cases of the several infectious diseases were reported from were the means of noting many insanitary conditions in and about the houses. One defect in many house drains has been reported to the Committee, viz., the imperfect iron traps which are so often met with. These are nearly always placed over a small cesspool in which a considerable amount of sediment accumulates. These iron and very imperfect

Carr House Hospital.

Sanitary Defects at Houses.

traps were found at 22 houses where cases of diphtheria or typhoid fever were reported. The ventilating pipes provided for private drains are repeatedly found to be too short and opening out near to some window of the house. The risks of a down draught carrying the air from the ventilating pipe into the house ought to be guarded against, and the recommendation has been to carry such pipes to a greater height.

In connection with the cases of enteric fever, especially, the providing of sanitary pails to receive all infected matters has, I think, greatly helped in preventing the spread of the disease to neighbouring families. Last year in only one instance did a case occur in a neighbour's house, and nine-tenths of all the cases were single ones in the families attacked.

Scavenging of House Refuse.

The scavenging of the contents of the closets and ashpits has been carried out satisfactorily when compared with the same work in previous years. 23 midden privies have been changed into water closets, but I think there are many others which equally need this alteration. Among the 140 houses of which the plans were passed last year, a great majority are to be provided with a privy and ashpit; the improvements in construction now required do not meet all the objections that can be urged against these places in a town which is so rapidly being covered with houses, to say nothing of the increased cost which will be necessary to cleanse the larger number. With a plentiful supply of water, and a large area of land for sewage disposal, I feel sure the health of the inhabitants would be safe-guarded by substituting the water carriage system of refuse disposal to a far greater extent.

There is one branch of sanitary work which is rapidly being carried out in many parts of the town, viz., the re-paving of back passages, and also of many of the common yards. Reports were made to the Committee of the worst of these in Marsh Gate, the work, which has been completed, means a change from wet and dirty yards to a clean, dry surface, and a more wholesome

condition in and close to the houses. Reports have also been made as to the structural defects of several houses, of overcrowding in others, and many of the causes of these complaints have been remedied. Workshops are also included in the idea of a house, and the clean condition of these, and the prevention of too many workers being employed for the size of the rooms, are matters which require supervision. The result of the visits paid shew that there are few causes of complaint. Our bakehouses and milk shops are regulated with a due regard to every reasonable request.

Sixteen samples of food were last year analysed, the public analyst reported on these that, of 15 samples of new milk,

4 were genuine.

7 were of fair quality.

4 were of inferior quality.

and 1 sample of lard was genuine.

The Committee, after successfully prosecuting a person for keeping an unregistered common lodging-house, requested the chief constable to have the registered houses more frequently inspected during the nights, and to report the results to the sanitary department.

I remain,

Gentlemen,

Your Obedient Servant,

J. MITCHELL WILSON,

Medical Officer of Health.

DONCASTER, 23rd February, 1897.

INSPECTOR'S TABLES.

NUISANCES ABATED, ETC., DURING 1896.

Inspections made	...	...	...	...	...	...	5255
Written and Verbal Notices given	...	...	...	...	...	...	1533
Ash-pits covered and ventilated	...	...	...	...	...	...	11
Privies converted into water closets	...	...	...	...	...	...	33
House and yard drains repaired or trapped	...	...	...	...	...	...	113
Houses disinfected after illness from infectious diseases	...	...	...	...	...	...	294
Ash-pits, etc., scavenged	...	...	...	...	...	...	8781
Other nuisances under The Public Health Act	...	...	...	...	...	...	130
Canal boats inspected...	...	...	...	...	...	...	122
Notices for breach of the Canal Boats Regulations	...	...	...	...	...	...	17
Common lodging-houses on the register	...	...	...	...	...	...	6
Bakehouses on the register	...	...	...	...	...	...	20
Dairies and milkshops on the register	...	...	...	...	...	...	46
Two carcases of meat and 1 calf were destroyed, having been found unfit for human food.							

SAMPLES OF FOOD SUBMITTED FOR ANALYSIS,
ETC.

1. Milk (4 genuine, 7 fair quality, 4 inferior quality)	...	...	...	...	...	...	15
2. Lard (genuine)	...	...	...	...	...	...	1
Total	...	...	...	...	...	...	16

Cases summoned before the magistrates :—

3 Offences against Canal Boats Act ; fined and ordered to pay costs.

1 for Smoke Nuisance ; ordered to abate and pay costs.

1 for keeping an Unregistered Common Lodging House ; fined and to pay costs.

BEDDING, ETC., DISINFECTED BY STEAM AT THE
PUBLIC DISINFECTING APPARATUS—1896.

Beds	...	...	...	...	...	...	...	311
Mattresses	...	...	...	...	...	...	...	212
Pillows and Bolsters			...	...	...	...	...	874
Pairs Blankets		...	...	...	...	...	...	158
Pairs Sheets	...	...	...	...	...	...	...	133
Counterpanes		...	...	...	...	...	...	146
Articles of Clothing	...	...	...	...	...	...	...	40
Sundry Articles	...	...	...	...	...	...	...	103
								<hr/> 1977

JOHN THOMPSON,

INSPECTOR.

TABLE I.

Summary of Birth and Death Rates in the Borough, and in each Ward, during 1896, compared with the Returns for the whole of England and Wales.

	Population in 1896.	Rate per 1,000 of the Population.					Deaths in Children under one year per 1 000 Births.
		Births.	Deaths.	From Zymotic Diseases.	From Phthisis.	From other Respiratory Diseases.	
BOROUGH...	28,757	30·6	16·7	1·6	0·9	2·9	139
CENTRAL...	5,224	21·0	19·7	1·9	1·1	2·1	99
EAST ...	4,012	19·0	15·2	2·2	1·4	3·2	143
SOUTH ...	5,296	35·6	15·8	1·3	1·1	2·8	164
NORTH ...	4,441	40·3	17·7	1·6	0·0	3·7	100
ST. GEORGE'S ...	3,961	30·0	17·4	1·5	0·5	3·4	176
WEST ...	5,822	36·7	15·1	0·8	0·5	2·2	120
ENGLAND & WALES	.....	29·7	17·1	2·1	.....	.....	148

TABLE II.

DEATHS FROM THE PRINCIPAL ZYMOTIC DISEASES,
DURING 1896, AND THE FIVE PREVIOUS YEARS.

	1896	1895	1894	1893	1892	1891
Small-Pox	0	0	0	3	0	0
Measles	0	22	10	3	25	14
Scarlet Fever.....	11	10	7	9	10	5
Enteric and Continued Fevers..	5	3	6	9	6	5
Diarrhoea & Dysentery	3	38	9	43	10	22
Whooping Cough	14	2	16	8	18	5
Diphtheria.....	11	2	1	4	5	6
Membranous Croup.....	2	3	3	2	1	2
Cholera	0	0	0	2	0	0
Total for each year	46	80	52	83	75	59

TABLE III.

SUMMARY OF THE BIRTH AND DEATH RATES IN
DONCASTER DURING THE TEN YEARS—
1886 TO 1895.

Year.	Rates per 1,000 of the Population.					Deaths among Children under one year per 1,000 Births registered.
	Births.	Deaths.	From Zymotic Diseases.	From Phthisis.	From other Respira- tory Diseases.	
1886	34 0	19·5	2·1	1·7	3·9	180
1887	35·4	19·6	1·5	1·6	3·7	154
1888	32 4	18·0	2·3	1·0	3·5	167
1889	31·4	17·0	2·3	1·4	2·4	179
1890	29·5	19·9	2·3	1·3	3·5	183
1891	32·0	19 0	2·2	1·0	4·5	168
1892	32·0	17·6	2·7	1·2	3·1	150
1893	33·3	21·0	3·0	1·3	3·3	188
1894	32·0	17·4	1·8	1·2	2·9	154
1895	33·7	20 0	2·3	1·4	3·1	181

TABLE IV.

DEATHS FROM SEVERAL GROUPS OF DISEASES IN THE
BOROUGH.

	Total.	Deaths per 1,000 of the Population	Proportion of Deaths in every 1,000 from all causes.
From			
1.—Zymotic Diseases	46	1·6	95
2.—Pulmonary Diseases (other than Phthisis)...	83	2·9	171
3.—Tubercular Diseases ...	33	1·1	68
4.—Wasting Diseases of Infants	25	0·9	51
5.—Convulsive Diseases of Infants	31	1·0	64

1.—Includes Measles, Scarlet Fever, Whooping Cough, Enteric or Typhoid Fever, Diphtheria, and Diarrhœa.

2.—Includes Bronchitis, Pneumonia, Pleurisy, and Asthma.

3.—Includes Phthisis, Scrofula, Tabes Mesenterica.

4.—Includes Marasmus, Atrophy, Debility, and Premature Birth.

5.—Includes Hydrocephalus, Menengitis, Convulsions, and Teething.

DONCASTER

RURAL DISTRICT COUNCIL.

TO THE DONCASTER RURAL DISTRICT COUNCIL.

GENTLEMEN,

I have now to present the Annual Report required to be made by me of the health of the districts, and the sanitary matters considered and works carried out during the year 1896.

During the year the townships of Balby and Hexthorpe have been formed into an Urban District, and the outlying portions of Tickhill have been added to the Urban District of Tickhill. The population of the Doncaster Rural Districts Population was therefore lessened by that separation; on the other hand in the parishes of Conisbro', Bolton-uopon-Dearne, Thurnscoe, and Wheatley, there been a considerable increase, as shown by the number of new houses occupied. The net population of the whole districts upon which the following calculations are braced is 28,600, distributed as under:—

In the Bawtry Registration Sub-Districts	6,290
„ Campsall „ „	5,253
„ Barnbrough „ „	6,406
„ Tickhill „ „	10,651
	<hr/>
	28,600

During the year 998 births were registered, males Births. 508, females 490; the birth-rate was 35 per 1,000, the average

rate for 10 years as given in the Registrar-General's returns was 33 per 1,000. This fact shows that the estimate of the population made for last year is near the mark, as any excess of the numbers would have reduced the birth-rate. The following were the birth rates in each of the registration sub-districts:—

In Barnbrough Districts 36 per 1,000.			
„ Bawtry	„	26·3	„
„ Campsall	„	24·4	„
„ Tickhill	„	41·0	„

In Conisbro' parish and in Bolton the birth-rate was 50 per 1,000, in Thurnscoe it was 39, in Denaby 34, in Wheatley it was only 31, in Bentley 28, while in the other parishes having a population exceeding 500 the birth-rate was considerably under the average. In reporting upon the number of deaths among young children, it is important to consider these cases where the birth-rate is very high.

Deaths.

479 deaths, 255 males and 224 females, were registered in these districts; 14 additional cases are added of persons who belonged to the rural districts but died at the Doncaster Workhouse or the Doncaster and Balby Hospitals for infectious cases; while the same number of deaths were registered within the district at Carr House Hospital, of persons who did not belong to the rural districts, the total number 479 was equal to a death-rate of 16·7 per 1,000, which is just under the 10 years average death-rate.

The death-rate in the Barnbro' Sub-Districts was 15·6 per 1000

„ Bawtry	„	13·0	„
„ Campsall	„	16·4	„
„ Tickhill	„	18·8	„

The greatest death-rate in the largest separate townships was in Conisbro' 21·9, in Bolton 18·3, and in Denaby it was 14, Bentley 16·6, and in Wheatley only 11, in this township it is possible that the population is being over-estimated.

Deaths from
Zymotic
Diseases.

There were 41 deaths, including 4 at outside hospitals' caused by zymotic diseases, viz., from

Enteric Fever	...	...	...	...	...	...	8
Scarlet Fever	...	...	...	...	...	...	4

Diphtheria	3
Membranous Croup	3
Measles	7
Whooping Cough	8
Diarrhœa	8

The death-rate from these was 1·6 of the whole population.

In the Bawtry Sub-Districts the death-rate from these infectious diseases was less than 1 per 1,000, in the remaining three sub-districts it closely agreed with the rate for the whole district. In Bentley parish the zymotic rate was 2·5 per 1,000, in Denaby it was 2·8, in Thurnscoe it was 2, in none of the other townships was this rate above the average of the sub-district.

From phthisis or consumption there were 18 deaths, equal to 0·6 per 1,000 ; from bronchitis and other diseases of the lungs there were 77, equal to 2·7, together the death-rate was equal to 3·1 ; the deaths in this group were also less than the average, and in none of the sub-districts was there any great difference from the general average. In Conisbro' the deaths from diseases of the lungs caused a death-rate of 4, Bentley 3·8, Bolton 3·5, in other districts the average rate was not exceeded. Three deaths were registered as due to influenza associated with some form of disease of the chest, that is but a very low mortality considering the many cases of illness now reported as due to that disease.

The deaths among infants under one year are compared not with the population but with the number of births registered during the year, *e.g.*, last year of every 1,000 children whose births were registered last year, 153 died before they had lived 12 months. This proportion is largely influenced by the birth-rate, and even more immediately by the amount of care bestowed in nursing and feeding these infants. The deaths among young children have a very controlling effect upon the general death-rate.

In the Bawtry Sub-Registration Districts the proportion of deaths among infants were 102 per 1,000 births :—

In the Campsall Districts	140
„ Barnbrough „	155
„ Tickhill „	173

Deaths from
Diseases of
the Lungs.

Deaths at
different
Ages.

In the township of Conisbro' the proportion was 211, in Thurnscoe 205. Again if the proportion of deaths among children under five years of age be taken, it is far too often found that it greatly exceeds the proportion they bear to the rest of the population, *e.g.*, last year *one-half* of all the deaths that occurred were in young children under five years of age ; in the Tickhill Sub-districts 59 per cent. of the deaths were under that age.

In the Barnbrough Districts there were 54 per cent.

„	Bawtry	„	„	36	„
„	Campsall	„	„	35	„

In Conisborough township there was 69 per cent.

„	Thurnscoe	„	„	62	„
„	Bolton	„	„	57	„
„	Denaby	„	„	50	„
„	Norton	„	„	50	„
But in Bentley	„	„	only	40	„
„	Wheatley	„	„	39	„

The excessive death rate among the young hinders that lowering of the death-rate in the districts generally which sanitary works are intended to effect, and the continuance of the excess as in the worst of the townships quoted is proof that the children are not living amid healthy surroundings.

It is interesting to note what per centage of the inhabitants in our districts survive to the age of 65 years. 18 per cent. of the persons who died last year had reached or exceeded the age of 65 ; there was a wide difference between the Campsall Sub-Registration Districts where 31 per cent. were of aged people, and that in the Tickhill Sub-Districts where only 10 per cent. had reached that age.

24 deaths were last year registered on a certificate from the Coroner. 7 of these were returned as due to natural causes, one was a case of suicide, and 16 were caused by some form of accident. 12 deaths were not certified either by a Doctor or the Coroner, 7 of these were children under five years of age and 5 were of various ages beyond that up to 75 years.

CASES OF INFECTIOUS DISEASES NOTIFIED.

During 1896 221 cases of infectious diseases were notified :—

Cases of
Infectious
Disease.

91	were	cases	of	scarlet	fever.
72	„	„	„	enteric.	
21	„	„	„	diphtheria.	
5	„	„	„	membranous croup.	
30	„	„	„	erysipelas.	
1	„	„	„	puerperal fever.	
1	„	„	„	small-pox.	

Among the 91 cases of scarlet fever there were only 4 deaths, which shows a large per centage of recoveries. The cases were reported from 17 townships but the disease was especially prevalent in Wheatley, Bolton, and Bentley, where 60 per cent. of all the cases occurred. In a majority of all the townships not more than 3 persons were attacked. As the same disease has been unusually prevalent during the year in the town of Doncaster the infection in Wheatley and Bentley was in part kept up from that source. Among the new population arriving at Goldthorpe Lane Ends in Bolton parish there were several cases in the early part of the year. Owing to the hospital having been removed from Denaby to Balby, and not being ready to receive patients until April a much smaller number of cases of scarlet fever were removed to the hospital last year. 15 cases were treated there and in the Doncaster Corporation Hospital. All the cases treated in the hospitals recovered. Among those nursed at home the infection naturally spread to others who were susceptible in the family, and 2, 3, 4, and 5 cases were reported at intervals in the same house. It is to be expected, and we find the infection does spread from such houses where any real separation of the sick cannot be carried out, and it is a difficult matter to keep the patient when apparently well, yet, peeling and very ready to spread infection, confined to one bedroom. 2 of the 4 deaths from scarlet fever were of adults.

Scarlet
Fever.

72 cases of enteric or typhoid fever were notified, a larger number than in the previous year; among the 72 cases there were 8 deaths, equal to 11 per cent. of the persons

Enteric
Fever.

attacked. 90 per cent. of these cases occurred in the townships of Denaby, Conisbro', and Bolton. Single cases occurred in the parishes of Askern (a visitor), Owston and Branton, and the disease proved fatal in each. Several cases occurred at Thurnscoe, and caused some anxiety owing to the rapid growth of the place without adequate sanitary arrangements being ready. It was, however, in August that the first serious outbreak occurred among the colliery workers at Denaby. The first case was a servant girl who had been sent home ailing, and enteric fever was not suspected until three weeks after her return to Denaby. A few cases followed in houses widely apart in July. On August 12th I received notice of 7 cases in 4 houses; these had been ill for several weeks with supposed influenza, and hence the infection had spread. 21 fresh cases were reported up to the end of the month. As many of the cases occurred in houses crowded with large families or lodgers, the only hopeful means of dealing with the cases for their own sakes and to prevent the spread of the disease was to induce as many as possible to go to the hospital. Arrangements were accordingly made to remove the cases of scarlet fever in the Balby Hospital to Carr House, and 16 cases of enteric fever were removed to Balby. Further cases occurred in September, but none in Denaby from that time until the end of December. In September and October several cases of the same fever occurred among the miners living in houses near, but in the neighbouring parish of Conisbro' there appeared to be good grounds for the opinion that these cases had a connexion with those in Denaby. The water supply is common to both districts, but while many cases were ill in Denaby only one or two occurred among twice the population near to who used the same drinking water. As 6 fresh cases were reported in December at Denaby and the water was found to be much discoloured inquiries are being made as to the cause. The water at its origin is clear and a wholesome supply.

In November last 2 cases of enteric fever were reported from Bolton-on-Deerne, and 10 cases followed in December. 4 of these were from one house. The first case there was a stranger removed from a house where there was

sickness; that child fell ill within a week of its arrival, and as it was nursed in a greatly overcrowded house, it was not surprising that other cases of fever followed. The water used by all the houses where fever occurred at Bolton is obtained from private wells. 4 cases were removed to the hospital. Year by year there are many returns, which show that cases of enteric fever are distinctly infectious, a view which is not always held by doctors. Last year 28 cases of that fever occurred at 12 houses, and these were not explainable by the supposition that the second or third cases were due to the same infection as the first case. Repeatedly have I found that the illness has been treated for two and three weeks as cases of supposed influenza, and therefore no precautions against infection had been adopted. We have used every effort to destroy all infected matter, but when houses are greatly overcrowded, and closets are common to more than one family, there is increased risk of the disease spreading.

There were 21 cases of diphtheria and 5 of membranous Diphtheria. croup notified. Among these there were 6 deaths, 3 among the 12 cases that occurred in Bentley township, and 2 of the 5 cases reported from Bolton. The earlier cases at Bentley were for a time scarcely considered as infectious, and 3 deaths were registered from "croup," and children returned to school who had been ill with that disease, and to one of these several of the subsequent cases of diphtheria were believed to be due. Cases of diphtheria also followed in the families who had lost children from croup. The 15 cases were confined to 8 houses, proving how infectious this form of disease of the throat is, and very many of those attacked die. In another parish 3 cases occurred in one house, after the infection had been introduced there.

Some of the cases of this disease occurred at houses where serious unsanitary conditions existed; at 2 houses the disease followed cases of scarlet fever and long nursing, and one was suspected as due to infected milk.

Cases of measles and of whooping cough are not notified, but inquiries were made about outbreaks of these Measles and Whooping Cough.

in several parishes. No less than 15 deaths of children under 5 years of age were caused by measles and whooping cough. Cases of measles have been very prevalent in Conisbro', and visits to many houses have only shown that, as a rule, there is but little care taken to keep infected children apart from others.

It was necessary to give certificates to close the day schools at Armthorpe, Bentley, Old Denaby, and Austerfield on account of outbreaks of these infectious diseases. The effect of such closing is not altogether successful in controlling the epidemic; in other cases I have certified for the non-attendances of infected children, which usually meets the requirements of the school equally satisfactory.

Hospital at
Balby for
Infectious
Cases.

During the 9 months that the hospital has been in use at Balby, 52 patients have been treated there; 15 suffered from scarlet fever, and 37 from enteric fever; 4 of the latter died.

The patients were admitted from the parishes of Tickhill, Denaby, Conisbro', Bolton, Sprotboro', Warmsworth, Wheatley, and Marr. The hospital, one of Humphries, consists of two wards, with 12 beds; it was removed from Denaby, and is erected on a very suitable site, a portion of the Workhouse field at Balby. There is no disinfecting apparatus yet provided, but in all other respects the hospital is well equipped. It was last year of the greatest possible help in dealing with cases of fever from crowded houses.

Water
Supply.

The water supply of these districts has not been materially altered during 1896. In February an inquiry was held at Thurnscoe to consider a scheme for providing a water supply there. The proposed supply proved at the last moment inadequate. The mains of the Dearne Valley Water Company were afterwards laid through Bolton, Goldthorpe, to Thurnscoe, but that water has not been much used in the latter place. Meanwhile a fresh supply of water has been obtained by the Hickleton Main Colliery Company; that water is excellent in quality, and has now been approved by the Local Government Board. The work of laying the mains will, it is hoped, be begun at

an early date. The water in two wells there has been fouled by the contents of cesspools near.

A large proportion of the houses at Goldthorpe Lane Ends are now supplied with water from the Dearne Valley water mains, also 24 houses at Bolton Green, and a few houses in Bolton. In the village of Bolton the water supply is mainly from wells, which are not either conveniently placed for many of the houses, and the water from two of the main supplies is liable to be polluted.

The village of Warmsworth has just had water mains laid throughout, and water from the Doncaster Corporation mains will be available from 7 stand pipes placed at a convenient distance to groups of houses. This work has been carried out at the expense of Mr. Battie-Wrightson, the chief property owner. At a parish meeting recently held in Bentley, it was decided to decline the offer of the Doncaster Corporation to extend their mains on the Bentley Road. One well water there was found to be very much polluted, and as the houses increase, with drains, ashpits, and pigstyes, and cowsheds in the yards or gardens, it will become increasingly difficult to secure and to keep pure water. Some few households still use water from the brook, which is known to be polluted.

The water supply for Conisbro' has been frequently considered by a sub-committee, and by the Sanitary Committee. A proposal was made to collect the water which now flows out of Wellgate. Mr. Barras, Surveyor, proposed to supplement that supply from another source, and to collect the whole into a reservoir. The estimated cost was considered large, but on the Wellgate water being analysed and not proving satisfactory, the Sub-Committee were empowered to meet the Doncaster Corporation to see if terms could be arranged for a supply from the mains, which pass through Conisbro'. I have previously reported that inquiries are being made as to the cause of the discolouration of the water from the mains at Denaby.

The deep well which was sunk at Burghwallis did not secure a satisfactory supply. Another notice has been

served. Analyses were made of 3 well waters at Bawtry, at the suggestion of the Parish Council; each was found to be very impure. Several deep wells sunk there during the last few years continue to yield an abundant supply of good water. A satisfactory supply was obtained by sinking a well on the site close to the fever hospital at Balby. At Clifton, by laying 50 yards of a 2-inch water pipe, the water from a spring is now more easily reached by the inhabitants.

78 fresh houses in Wheatley last year obtained a supply of water from the Doncaster mains.

21 new wells were sunk throughout the rural district. Of 14 samples of well waters analysed, 11 were found to be so impure as to be unsafe to drink.

WORKS OF SEWAGE DISPOSAL.

The extensive scheme for sewerage Conisbro' and Denaby was completed last year. The sewage is first treated by filtration through the chemicals used by the International Sewage Company, and the effluent afterwards carried over 8 acres of land. In July notices were served upon owners of property in Conisbro' to connect the house drains with the new sewers. This work has and is being carried out under Mr. White, the engineer for the scheme.

The Local Government Board have now given their sanction to the carrying out of the scheme for the drainage of Thurnscoe, the consideration of the scheme formed the subject of an Inquiry by an Inspector of the Local Government Board in August, 1895. This work has been urgently wanted for many months.

The main sewer in Armthorpe has been re-laid for a distance of 390 yards. This improvement has been long needed, as several of the yard and house drains were found in a very unsatisfactory state.

The Parish Council of Adwick-le-Street have decided to take steps to remedy the defective old sewers in the village,

on account of complaints of the offensive smells from the openings in the roadway and the unsatisfactory nature of the outlet.

The sewage scheme for Bolton-on-Dearne has not yet received the final sanction of the Local Government Board, Considering the unusually large number of cases of enteric fever, scarlet fever and diphtheria, which occurred at Bolton last year, I think there is need for improvements to be carried out both in the drainage and water supply there at the earliest possible opportunity. The District Council decided to join the River Idle Commissioners in sharing the cost of cleansing the culvert at Bawtry, and arrangements for cleansing another open drain were to be considered by sub-committees from the Doncaster, and Blyth, and Cuckney Burial District Council's.

The sewage settling tanks and filters have again been cleaned out at Austerfield, and the works answer all requirements there.

The extensive works of new sewers and drains completed means a very large number of houses provided with well trapped gullies, and all sinks carefully cut off from the drains. Cesspools cannot be dispensed with yet, especially in Bentley parish where the matter of sufficient sewers and means of sewage disposal have not been decided upon.

The contracts for scavenging the ashpits in the parishes Scavenging. of Conisbro', Bolton-on-Dearne, Thurnscoe, and Wheatley were renewed, the work in each township has been satisfactorily carried out. Occasionally complaints are made, but these are more quickly remedied when a contractor is responsible for the work, extra cleansing and disinfecting of the closets, &c., is required when infectious cases occur.

Two houses were condemned as unfit for human habitation, additional ventilation was provided in another, while the serious amount of over-crowding found in 21 houses was required to be abated.

In Wheatley 5 new streets were made and taken over by the Rural District Council, in these streets and also in Bentley Road the houses have been numbered to the very

great convenience of the public. Greater details of the year's work in all its parts are given in the accompanying table prepared by Mr. Barras.

I remain, Gentlemen,

Your obedient Servant,

MITCHELL WILSON,

Medical Officer of Health.

Doncaster, 16th January, 1897.

STATEMENT SHOWING SANITARY WORK
COMPLETED AND NUISANCES ABATED DURING
THE YEAR 1896.

Number of Inspections made	...	...	...	4027
Number of Notices served by order of the Rural District Council relating to defects of Drainage, ventilation of Sewers and W.C.'s, cleansing of ashpits, &c.	...	...	...	40
Houses connected with New Sewers	...	...	...	1267
Number of Cesspools abandoned by connecting House Drains to Sewers	...	...	...	9
Number of New Cesspools	...	...	...	18
Drains and Water-courses cleaned and repaired	7½	miles		
Number of Sinks disconnected over trapped Gullies	...	...	...	624
Number of W.C. Soil pipes ventilated	...	...	...	47
New Trapped Gullies for Surface Water	...	...	...	20
Houses stoved, disinfected, and cleansed	...	...	...	180
Houses closed (1), and over-crowding in Houses abated	...	...	...	22
New Wells sunk	...	...	...	21
Pumps and Hydrants repaired	...	...	...	21
Number of Houses newly connected with the Doncaster Water Mains in Balby, Hexthorpe, and Wheatley	...	...	...	142
Number of Houses in Warmsworth provided with Doncaster water chiefly from seven stand pipes	...	...	...	216
Wells closed	...	...	...	4
Connexions to the new supply at Barnbrough 45, Harlington 18	...	...	...	63
W.C.'s provided for New Houses				48
Privies and Ash-pits „ „ New Houses				556
Additional „ „ „ Old Houses				14
Pigs and Manure Nuisances abated	...	...	...	12
Plans considered	...	...	...	91

These included: Dwelling-houses	...	...	252
„ Other Buildings and Altera-			
tions	...	...	34
New Man-holes provided to Sewers	...	...	4
Old „ repaired and altered	...	...	5
New Ventilating Shafts for Sewers	...	...	3
Number of Inspections of Houses where cases			
of Infectious Disease reported	...	...	127
Cow-sheds on the Register	...	...	174
Slaughter-houses inspected	...	...	18
Number of Houses in Conisbro' 1756, Hex-			
thorpe 963, Wheatley 579, Bolton-on-Dearne			
533, Thurnscoe 249; the ashpit for each			
house in these parishes is cleansed every			
three months under the supervision of the			
Authority	...	...	4080

LIST OF PARISHES IN WHICH NEW SEWERS AND
DRAINS HAVE BEEN LAID, OR NEW HOUSES
ERECTED :—

	New Sewers.	New Drains.	New Houses.
Conisbro'	1½ miles ...	2215 yds. ...	263
Bolton-on-Dearne &			
Goldthorpe	— ...	3400 „ ...	102 yds.
Bentley-with-Arks'y	40 yards ...	1167 „ ...	35
Askern	— ...	125 „ ...	5
Armthorpe	400 „ ...	— ...	—
Cantley	180 „ ...	— ..	—
Adwick--on--Dearne	40 „ ...	— ...	—
Thurnscoe	— ...	565 „ ...	113
Balby - with - Hext-			
horpe	— ...	460 „ ...	23
Wheatley	— ...	1385 „ ...	63

C. C. BARRAS,

Surveyor and Inspector.

TABLE I.

STATISTICS FOR THE RURAL SANITARY DISTRICT AND
REGISTRATION SUB-DISTRICTS DURING 1896.

	Rates per 1,000 of the Population.				Deaths under one year to every 1000 Births.	Percentage of Deaths among persons 65 years of age and upwards.
	Births.	Deaths.	Deaths from Zymotic Diseases.	Deaths from Respira- tory Diseases.		
Rural Sani- tary District...	35.0	16.7	1.3	3.1	153	17
Abrough....	36	15.6	1.5	3.0	155	17
Wry.....	26.3	13	0.6	2.6	102	21
Worsall.....	24.4	16.4	1.7	3.4	140	31
Whill.....	44.3	18.4	1.6	3.7	173	10

TABLE II.

BIRTH AND DEATH RATES IN THE LARGEST PARISHES
DURING THE YEAR 1896.

Parishes.	Popula- tion, 1896.	Rates per 1000.				Deaths under one year to every 1000 Births.	Percent- age of Deaths among persons 65 years of age and up- wards.
		Births.	Deaths.	Deaths from Zymotic Dis- eases.	Deaths from Respira- tory Dis- eases.		
Warton.....	593	18.5	15.0	1.6	1.6	181	16
Warton by Dun.....	516	29.0	19.3	1.9	3.8	133	20
Warton by.....	947	25.3	12.6	..	4.2	41	25
Warton by-with-Arksey.	2100	27.6	16.6	2.3	3.8	103	25
Warton by-on-Dearne ..	2390	48.5	17.5	1.6	3.3	120	11
Warton by.....	547	21.9	18.2	1.8	3.6	..	10
Warton by 'Worsall'.....	7160	49.5	21.9	1.6	4.1	211	8
Warton by.....	1848	34.0	12.9	2.7	2.7	93	12
Warton by.....	500	32.0	24.0	4.0	4.0	250	25
Warton by-scoe.....	1100	35.4	14.5	1.8	1.8	205	6
Warton by-orth.....	561	44.5	10.6	...	5.3	..	..
Warton by-ley.....	2556	31.2	10.9	0.7	3.1	100	21

TABLE III.
BALBY ISOLATION HOSPITAL.
NO. OF CASES TREATED DURING 1896.

Disease from which Patients Suffered.	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Died.	Re- covered.
Enteric Fever	1	.....	3	1	16	6	7	.....	3	4	33
Scarlet Fever	4	4	5	.....	.....	.. ..	.....	2	.....	15
Total	1	4	7	6	16	6	7	.....	5	4	48

Mortality from subjoined causes, distinguishing deaths of Children under 5 years of age.

[illegible]

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

[illegible]

TABLE B.

Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Rural Sanitary District of Doncaster; classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics ; public institutions being shown as separate localities.	Population at all Ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.										Cases Removed, &c. to Isolation Hospitals.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	Census in 1891.	Estimated in 1896.			Small-pox.	Scarlatina.	Diphthheria.	Membranous Group.	Fevers.						Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Diphtheria.	Enteric Fever.	Scarlet Fever.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Barnbrough Sub-Dist.	4139	6406	232	Under 5 5 upwds.	7 23	2 5	1	15	1</

“Notification of Infectious Disease” is compulsory in the District since 1st March, 1890.
Hospital for Infectious Cases provided at Balby.

GOOLE

Rural District Council.

GOOLE

Rural District Council.

POPULATION, CENSUS 1891	...	...	8,977
ESTIMATED POPULATION IN 1896	...	8,318	
AREA IN ACRES	...	...	38,238

THE SUB-REGISTRATION DISTRICTS ARE :—

	POPULATION.		AREA IN ACRES.	
GOOLE RURAL	...	1,400	...	9,105
SNAITH...	...	4,282	...	13,687
SWINEFLEET	...	2,636	...	15,446

TO THE GOOLE RURAL DISTRICT COUNCIL.

GENTLEMEN,

It is again my duty to present my Annual Report, which deals with the sanitary work of the year 1896.

In the report for 1895 I stated that plans had been passed for 104 houses. These were nearly all in Rawcliffe Parish. During the past year we have found that nearly all these new houses were occupied ; allowing for removals from old houses to new there must have been some considerable increase in the population of Rawcliffe. I have therefore calculated upon an increase of 300, and estimate the whole population of the Districts now to be 8,318.

Population.

Birth and
Death Rates.

During 1896, 268 births were registered—males, 135, females, 133. The birth rate was 32·2 per 1,000. In the previous year the birth rate was 33.

In the Snaith Registration Sub-Districts the births equalled	34·6 per 1,000
In the Swinefleet Registration Sub-Districts the births equalled... ..	31·0 per 1,000
In the Goole Rural Registration Sub-Districts the births equalled	27·0 per 1,000

The birth rate in several of the parishes with the greatest population, was :—Swinefleet 42, Rawcliffe 38·6, Snaith 31, Hook 30 ; while in Airmyn, Cowick and Reedness it varied from 24 to 28. The comparatively high birth rate in Rawcliffe goes to show that my estimate of the larger population there is probably lower than it should be.

148 deaths—males 70, females 78—were registered in the Rural Districts last year. In addition there were 9 deaths registered in Goole of persons belonging to the Rural Parishes who had died at the Workhouse—they were all very old people—and one at the Cottage Hospital ; adding these, the actual number to be considered is 157. The death rate for the year was 18·8 per 1,000, which is 1 per 1,000 above the average of recent years.

In the Goole Rural Registration Sub-Districts the death rate was	14·3 per 1,000
In the Swinefleet Registration Sub-Districts the death rate was... ..	17·4 per 1,000
In the Snaith Registration Sub-Districts the death rate was	20·3 per 1,000

In Rawcliffe the death rate was considerably above the average either of the general District or of that Parish in previous years. It was 25 per 1,000 ; the death rate in Snaith was 17·5. In the remaining Parishes, having a population of 500, the death rate did not exceed 15 per 1,000.

Deaths from
Diseases
of the Lungs.

Some of the reasons for the wide difference in the Snaith Sub-Districts from the general average are to be explained in part in noting the deaths in the following group, viz., diseases of the lungs. From phthisis or consumption there were only three deaths registered, but from bronchitis, pneumonia, etc., there were 28, and two-thirds of these were

among children under five years of age. The death rate from these several forms of diseases of the lungs was 3·8 per 1,000 for the whole districts.

1·4 per 1,000 for the Goole Rural Sub-Districts.

2·6	„	Swinefleet	„
5·3	„	Snaith	„

but in Rawcliffe Parish the death rate from these was 7·8 (or double the rate for the whole districts), and in Snaith Parish 6 per 1,000. Three-fourths of these deaths occurred in the first and fourth quarters of last year.

Eight deaths were registered from zymotic diseases, viz., four from diphtheria, and one each from scarlet fever, measles, whooping-cough, and diarrhœa. The death rate was only 1 per 1,000 in the whole Rural District; but as four of these occurred in Airmyn the death rate there was 7·4.

The proportion of deaths among infants under one year was equal to 190 per 1,000 births registered, in the Deaths at different ages.

Snaith Sub-Districts it was	...	200
Swinefleet Sub-Districts it was	...	163
Goole Rural Sub-Districts it was	...	160

When the causes of these deaths among infants are examined it is found that some were registered within a few days after birth, and among a small population a few such non-preventible deaths cause a great excess in the usual average.

Thirty per cent. of all the deaths during the year were among persons who had reached the age of 65 years or over. In the parishes of Cowick, Gowdall, Ousefleet and Pollington from 50 to 75 per cent. of the deaths occurred among that aged class.

Only one death was returned as not certified, while seven were registered on the certificate from the Coroner. Of these, five were due to natural causes, and two were the result of accidents.

In 1896, 55 cases of infectious diseases were notified :—

32	were cases of	scarlet fever.
17	„	diphtheria.
3	„	enteric fever.
2	„	erysipelas.
1		membranous croup.

Cases of
Infectious
Diseases
Notified.

Scarlet Fever. Among the 32 cases of scarlet fever there was one death. The disease prevailed in eight parishes during the first nine months of the year, but it was only in Airmyn that the disease spread to any extent. Twelve cases were reported from Airmyn during the months of May, June, and July. The infection of the first cases was traced to cases which had not been visited by a doctor or reported, yet the visits of these children to certain houses was followed by cases of scarlet fever. Six of the cases were removed to the Fever Hospital at Goole, but new houses became infected from those cases which refused to be removed. It was necessary to report that many of the house drains were not trapped, and the openings placed too near the doors.

The same complaint had to be made at the houses where cases of fever occurred in Ousefleet, and at two back-to-back houses at Boltgate. These latter had some alterations carried out very imperfectly.

One family in Hook Parish had six of the children ill with scarlet fever. The first attacked could not be removed to the Hospital.

Diphtheria. Although 17 cases of diphtheria were notified (among whom there were 4 deaths) yet the history obtained at the houses rather indicated that three more children died from diphtheria, although the cause of one death was returned as "croup," and in two "bronchitis." In each of these, cases of diphtheria were notified from the same houses.

In Rawcliffe Village cases of diphtheria were notified during March, May, June, August, and October. The history of the outbreak appeared to be of several cases of supposed "cold," "sore throats" returning to school after a short absence. At that time, alterations were being made at the Schools, and teaching was carried on temporarily in classrooms which were greatly over-crowded. The disease certainly seemed to spring from that source, for the patients were scattered over different parts of the Village. Advice was given to the teachers not to admit children for a time who were ill even with slight sore throats. None of the cases would for a time consent to be removed, but on finding three patients ill in a small room, removal of these was insisted upon, and all recovered. There were no special unsanitary conditions about the infected children which would of themselves be likely to cause diphtheria, but the chief cause appeared to be personal infection either at home, at school, or from unsuspected cases.

At Eastoft, which is partly in Yorkshire and Lincolnshire, there were many cases of diphtheria, but only one fatal case occurred among the population there in our District, although the case followed in the same house as one notified as "membranous croup."

Only three cases of enteric fever were notified. Two were in Snaith and one in Ousefleet.

Enteric or
Typhoid
Fever.

One of the former was treated in the Hospital. There did not appear to be any common cause for these cases. The latter case lived among very unsatisfactory sanitary surroundings. The family had been drinking water from an open pond which scarcely needed analysing to prove that it was unwholesome.

Cases of measles were prevalent in Rawcliffe in July. The illness was regarded, as it unfortunately so often is, with little or no care, and the disease spread among the school children. It was found necessary at last to close the schools for a few weeks.

Measles.

SANITARY WORK.

During the past year the work of supplying Hook Village with water from the Goole mains has not been begun. I have in previous reports dealt with this matter, both in its relation to the health of the inhabitants and also as large milk suppliers to the town of Goole. The uncertain motive power—a windmill—for pumping the water from the deep well at Airmyn has been replaced by an oil engine, and the regularity of the supply has been improved.

Water
Supplies.

Another of the well waters at Snaith was analysed and found to be very impure. I am afraid many of the shallow well waters there are not satisfactory, but good water is easily obtainable from the deep sandstone.

The Marshland Parishes of the Union are, however, entirely dependent upon rain water for drinking, washing, etc. The wells only afford a hard, unusable water for ordinary domestic uses. I made a house-to-house inspection afterwards (supplemented by Mr. Tudor) of the means provided for the storage of rain water. In August there was a very great scarcity, and water could only be obtained by buying from those who were fortunate to have large cisterns. There are a large number of houses in Swinefleet, Reedness, Whitgift, and Ousefleet which are without any water supply, and have no

means provided for collecting rain when it comes. I have urged before that at least cisterns should be provided for every house, of a sufficient size to hold the rain which falls. This work appears to me to be similar to the Council calling upon owners of property in other parts of the District to provide a much needed water supply by sinking the necessary wells. The town well at Gowdall has been covered and more carefully protected against impurities reaching the water.

SEWERAGE WORKS.

Sewers and
Sewage
Disposal.

Rawcliffe.

The scheme for a new system of drainage for Rawcliffe Village was completed last year. New sewers have been laid throughout from the Station to the River. The sewage is discharged into the latter, which is a tidal river for many miles above Rawcliffe. The most approved means of flushing from syphon tanks have been provided, and also ventilators. The house connections are now being made.

Swinefleet.

At Swinefleet, another scheme for the drainage of the village was suggested by the Parish Council. It has been in preparation for some time, but is now ready to be sent to the Local Government Board.

Snaith.

An inspection was made of the sewers and private drains in Snaith. Some alterations and extensions are needed specially to meet the requirements of the proposed new Court House and other buildings. A Report by the Surveyor upon the sewers in Snaith was ordered to be laid before the District Council, and in order to prevent fouling of the open ditches the possibility of obtaining a new and more direct outlet into the river is to be considered.

East and West
Cowick.

The sewers in East and West Cowick have been re-modelled and made more available for carrying off house sewage. Complaints have been made of the fouling of the main stream in that Parish by refuse from works there, and the owners were required to provide better means of filtration.

Ousefleet.

Cases of fever have been prevalent in the Parish of Ousefleet for two years. The means of carrying off house drainage were reported at several of these houses as being very deficient, at others there were none. There is no sewer, and as the houses are nearly all on the sides of the highway, I think it is very necessary that a sewer should be provided and proper drains made from the houses. The want of these causes a nuisance.

The Churchyard at Whitgift is in great danger of becoming unusable on account of the neglect of cleaning out the open drain on two sides of it. The Rural Council have urged those responsible to have these ditches deepened and made available for carrying off the subsoil water from the Churchyard.

Whitgift
Churchyard.

At Fockerby, the boundary ditch between the Goole Rural and the Isle of Axholme Districts was cleaned out by agreement. 200 yards of a new sewer was laid in our portion of the same Parish, and several house drains have now been connected to it. The Surveyor reports that the sewers in the Parishes of Cowick, Hook, Rawcliffe Bridge, and Reedness were flushed at intervals last year.

The closets and boxes at all houses in Snaith and Swinefleet continued to be cleansed by contract, and are reported as being well attended to. 22 old closets and ash pits were altered, having been reported as nuisances, and six new ones were provided.

Scavenging of
Ash-Pits.

Among the list of other nuisances often met with is the wet and dirty condition of the yards near to houses. There is often none or very indifferent paving, and the surface becomes littered with all manner of refuse in an attempt to soak up the wet; both conditions are injurious to the health of the inmates, and some plain evidence of this may be found in the excessive death rate from diseases of the lungs last year among children.

Paving of
Yards
near to the
Houses.

There are 64 dairies and cowsheds registered, but the only requirement of the regulations not attended to is the lime-washing of the sheds. There is still some irregularity in persons carrying on this trade without being registered. The Council again advertised and issued bills throughout the Districts drawing attention to the regulations made, and requiring every one engaged in the trade of milk selling to have their premises duly examined and registered.

Dairies and
Cowsheds.

The slaughter-houses require more attention, even though the trade is not very extensive.

Plans were passed for four new houses.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON, M.D.,

MEDICAL OFFICER OF HEALTH.

Goole, 3rd February, 1897.

*Inspections made, Work carried out, and Nuisances
abated during 1896.*

Number of Inspections made	...	...	...	...	538
Number of Nuisances found	...	...	...	...	304
Number abated after notice	...	...	...	...	264
Main Drainage taken up and re-constructed	...				480 yards
New Main Sewers laid	...	...	...	...	3024 yards
Houses connected with new and improved Sewers	...				192
House drains newly constructed		...	...	...	116
House drainage re-constructed	...	...	...	...	89
New Gullies provided for Mains and Dwellings	...				159
Sinks disconnected	...	...	...	...	7
Cesspools removed and Pot Gullies substituted	...				138
Old Privies and Ash-Pits re-constructed	...				22
Privies (new)	...	...	...	...	6
Houses cleansed, lime-washed, and disinfected after infectious diseases	...	...	...	...	37
New Houses and other Buildings, Plans passed for	...				4
Lodging-Houses Inspected	...	...	...	...	4
Slaughter-Houses cleansed and lime-washed	...				15
Wells cleansed	...	...	...	...	11
Cowsheds and Dairies inspected	...	...	...	...	64
Other Nuisances abated, referring to the removal of Manure, &c.	...	...	...	...	64
Village Water Courses cleansed	...	...	...	about 7½ miles	
Number of Notices requiring better Water Supply	...				11
Pig-sties removed...	...	...	...	...	9
Ash-Pits cleansed under contract	...	...	...	...	846
Boxes	„	„	...	...	1110
Canal Boats Inspected	...	...	...	...	12

E. C. B. TUDOR,

Surveyor and Inspector.

TABLE I.

STATISTICS FOR THE RURAL SANITARY DISTRICT COMPARED WITH
SUB-REGISTRATION DISTRICTS DURING 1896.

UNION AND SUB-DISTRICTS.	Rate per 1000 of the Population.				Deaths under 1 to every 1000 Births registered.
	Births.	Deaths.	From Zymotic. Diseases.	From all Respira- tory Diseases.	
Rural Sanitary District..	32·2	18·0	1·0	3·8	190
Goole Sub-District	27·0	14·3	1·4	1·4	160
Swinefleet Sub-District ..	31·0	17·4	0·0	2·6	163
Snaith Sub-District	34·6	20·3	0·8	5·3	200

TABLE II.

BIRTH AND DEATH RATES DURING 1896 IN THE LARGEST PARISHES.

PARISHES.						Rate per 1000 of the Population.	
						Births.	Deaths.
Cowick	..	..	..	..	..	27·5	11·2
Rawcliffe	..	..	..	..	..	38·6	25·0
Snaith	..	..	..	..	..	31·3	17·5
Swinefleet	..	..	..	..	..	42·0	13·0
Airmyn	..	..	..	..	..	24·0	15·0
Hook	..	..	..	..	..	30·0	15·0
Reedness	..	..	..	..	..	28·0	13·0

TABLE A.
TABLE OF DEATHS, during the year 1896, in the Rural Sanitary District of Goole, classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES adopted for the purposes of these statistics; public in- stitutions being shown as separate localities.	Mortality from all causes at subjoined ages.							Mortality from subjoined causes, distinguishing deaths of Children under Five Years of Age.																			
	At all Ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Small-Pox.	Scarlatina.	Diphtheria.	Croup.	Enteric or Typhoid Fever.	Puerperal Fever.	Measles.	Diarrhoea.	Whooping Cough	Erysipelas.	Rheumatic Fever	Ague.	Phtthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases	Total.	
(A)																											
Goole Rural Sub-Registration District	19	6	3	2	2	3	3	Under 5 5 upwds	1	1	1	1	...	...	...	1	1	1	...	...	...	...	1	1	...	3	9
Snaith do.	85	30	6	7	1	15	26	Under 5 5 upwds	...	...	1	...	...	...	1	...	...	...	...	...	...	2	8	6	1	31	36
Swinefleet do.	44	15	3	2	...	8	16	Under 5 5 upwds	...	...	1	...	...	...	...	...	...	...	...	...	1	5	3	...	12	18	
Totals	148	51	12	11	3	26	45	Under 5 5 upwds	1	2	2	...	...	...	1	1	1	1	...	...	...	3	19	9	2	60	63
The subjoined numbers have also to be taken into account in judging of the above records of mortality.																											
Deaths occurring outside the District among persons be- longing thereto.	...	...	...	...	...	...	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	9	...	...	1	...	8	5 upwds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	1	4	9	

TABLE B.

TABLE OF POPULATION, BIRTHS, and of NEW CASES of SICKNESS coming to the knowledge of the Medical Officer of Health during the year 1896, in the Rural Sanitary District of Goole; classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES.	Population at all ages	Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each locality coming to the knowledge of the Medical Officer of Health.							Number of Cases removed from their homes in the several localities for treatment in Isolation Hospital.			
	1895.			Small-Pox.	Scarlatina.	Diphtheria.	Membranous Group.	Enteric or Typhoid Fever.	Puerperal Fever.	Erysipelas.	Small-Pox.	Scarlatina.	Enteric Fever.	Diphtheria.
Goole Rural Sub-Regis- tration District....	1400	38	Under 5 5 upwds	.. ..	8 12	1 ..	.. ..	.. ..	.. ..	2	.. ..	2 5	....	....
Snaith do.	4282	148	Under 5 5 upwds	.. ..	.. 4	2 13	.. ..	2	.. ..	..	.. ..	.. ..	1	3
Swinefleet do.	2636	82	Under 5 5 upwds	.. ..	3 5	.. 1	1	1	....	..	....	....	....	....
Totals	8318	268	Under 5 5 upwds	.. ..	11 21	3 14	1	3	.. ..	2	.. ..	2 5	1	3

“Notification of Infectious Disease” is compulsory in the District since 9th December, 1889.
The name of the Isolation Hospital used by the sick in the District is the Fever Hospital, Goole.

GOOLE

Urban District Council.

GOOLE

Urban District Council.

Annual Report of the Medical Officer of Health,
For 1896.

POPULATION IN 1891	...	...	...	...	15,416
ESTIMATED POPULATION IN 1896	...	...	...	...	17,500
AREA IN ACRES	...	...	...	...	1,331

TO THE URBAN DISTRICT COUNCIL OF GOOLE.

GENTLEMEN,

It is now my duty to present to you the annual report for 1896.

Nothing special occurred last year to influence greatly the population of the town, and I have estimated that the average rate of increase would up to the middle of last year make the population 17,500. Population.

There was last year an increase in the number of births registered when compared with 1895. The total was 635—males 314, females 321. The birth rate was 36·2 per 1,000. The average rate for the previous five years was 37·2. Births.

Two hundred and eighty-eight deaths were registered in Goole last year—males, 142, females 146. Eleven deaths were of persons belonging to other districts outside Goole, and are deducted; on the other hand there are deaths of Goole people which take place away from the town, such as those at asylums, &c., but these I do not hear of until too late to deal with in the year's report. The corrected number for the year was 277, and is equal to a death rate of 15·8 per 1,000. That low death rate is an exceedingly favourable one for Goole, and only for one year, viz., 1891, has it been lower than that of last year. The standard death rate set by the Registrar-General, Deaths from
all causes.

based upon the numbers living at different ages in Goole is 17·6. That standard, I ought to say, is for the whole Goole Union, and as there is a larger percentage of young people in the town than in the rural parishes, the normal death rate is probably nearer 17 per 1,000. The average for the five years, 1891-1895, was 17·8. Goole can fairly claim that in spite of the physical disadvantages of site, &c., the standard of health compares favourably with towns having a similar population.

Deaths from
Zymotic
Diseases.

From diseases of the zymotic class there were 40 deaths.

15	were caused by measles.
13	„ diarrhœa.
5	„ whooping cough.
5	„ diphtheria.
1	„ enteric fever.
1	„ puerperal fever.

Seven-eighths of these deaths were among children under five years of age. More closely examined we find that twelve of the thirteen deaths from diarrhœa were of infants under one year, and that five deaths from whooping cough were also of infants under one year. From measles there died

5	children under 1 year,
5	„ between 1 and 2 years.
2	„ „ 2 and 3 years.
1	„ „ 3 and 4 years.
2	„ „ 4 and 5 years.

Deaths among
young child-
ren from
Infectious
Diseases.

These facts show that the causes for these many deaths from diarrhœa are in the homes of the little ones, for they had not lived long enough to come much under the influence of things outside. Some part of this waste of infant life is preventible, but the means to be used are better methods of feeding and rearing children, in aid of our sanitary work. From measles also two-thirds of the deaths were among children under two years. Both this disease and whooping cough are highly infectious, and it is evident that very young children more readily succumb than those who are older before they are attacked. Facts such as these convey this lesson at least, viz., that far greater care and anxiety should be shown to protect infant children coming in contact with any infectious disease. I am afraid they are far too often thoughtlessly taken into infected houses, or the disease is caught from one of the elder children in the family. I should like to note the fact that last year there were only seven deaths from diseases which are notified out of the forty in the list of zymotic diseases.

Deaths from
Diseases of
the Lungs.

From phthisis or consumption there were twenty-one deaths, equal to 1·2 per 1,000 of the population; ninety-six were caused by bronchitis and other diseases of the lungs, equal to 2·9; together, these were equal to a death rate of 4·1, which is the average rate in Goole, and is less than the

corresponding rate from diseases of the lungs for England and Wales, and only two-thirds the rate prevailing in the West Riding. But there is still need for every effort which will help to build up a healthy population, for last year forty-six children died from diseases which are grouped under the class of wasting diseases, and those marked by convulsions. Many probably inherited from weak fathers and mothers the seeds of their illness, while improper feeding and unsanitary surroundings exerted their share in inducing the disease.

Among every 1,000 births registered, 151 of the children died before they completed their first year, while 49 per cent. of all the deaths during the year were among children under five years of age. I have rather dwelt upon the mortality among children, for it is in striving to lessen the present excess among them that a lower death rate in the future in Goole is to be expected.

Fifteen per cent. of the deaths registered last year (excluding those of strangers who died at the Workhouse) were of persons who reached the age of 65 years or over.

Twenty-three deaths were registered on the Coroner's certificate. Nine of these were certified as having been due to ordinary disease, five were deaths from drowning, and nine were due to accident or violence.

In 1896 the number of cases of infectious disease notified was 92. That is less than one-third of the number reported in 1895.

Cases of Infectious Diseases notified

41	were cases of	scarlet fever.
17	„	enteric fever.
15	„	diphtheria.
3	„	puerperal fever.
16	„	erysipelas.

All the 41 cases of scarlet fever recovered. Sixteen were removed to the hospital, and no second case occurred on the return of the patients to their homes. Removal of the infected ones was only consented to when two and three of the family were affected. Thirteen cases were reported from five houses. Only two of these in one house were removed. These few figures amply show what isolation of the early cases can accomplish, and also that non-isolation usually means others in the house becoming infected.

Scarlet Fever.

Cases of scarlet fever were more prevalent in the North, South, and East wards of the town. There were very few in the Central or West wards. The disease was rife during January and February, a continuation of the general prevalence of it during 1895. There were afterwards very few cases reported until August, when a sharp outbreak occurred in Old Goole. As only one family were removed to the hospital, for three months we had to follow up fresh infections.

Enteric Fever.

There were seventeen cases of enteric or typhoid fever notified. There was one death. Ten of the cases in the town were removed to the hospital, one from the Workhouse, and while carefully tending these Nurse Blake was attacked with fever. One of the cases began on board a canal boat, another fell ill within a day or two of coming to Goole, the remaining cases were reported chiefly from the Central, South, and West wards. Each year brings additional proof of how infectious cases of enteric fever are when the patients are nursed in their own homes or even in a well-managed hospital. Three cases were reported from one house, and removal was only carried out when all were ill. Two children from another house were also treated in the hospital. The twelve cases nursed in the hospital all recovered. Apart from the four cases where the history of each seemed to point to infection contracted away from Goole, there was no definite cause traceable as to the origin of the others. They occurred as odd cases during ten months of the year.

Diphtheria.

Fifteen cases of diphtheria were notified, five proved fatal. The number of cases was less than half those reported in 1895. Three of the cases were removed to the hospital and recovered. The large majority of the cases (nine) were reported from houses in the North ward. Of the origin of three of these living in houses near there was a strong suspicion of direct infection; in another house in the same ward a child's illness was followed by that of the father. The remaining cases appeared from the history given to have been considered as cases of colds. Several of the houses in which the cases occurred are comparatively new, with satisfactory sanitary surroundings, and about other older houses there were no serious sanitary defects found.

Measles.

The most prevalent of all the infectious diseases last year was measles. During March the disease became so prevalent that it was decided to close the day schools for several weeks. Circulars were also addressed to the Head Masters and Mistress urging greater need for excluding children from infected families. Six of the children in the Workhouse were ill, but were isolated, and so any further spread amongst them was stopped. I cannot report any improvement in the home methods of dealing with cases of this disease. The stubborn fact of fifteen deaths caused by measles last year does not induce parents to guard their own or their neighbours' children more carefully from this infection.

Patients tr'ted
in the Fever
Hospital.

Forty-seven patients were treated in the fever hospital last year. Eleven of these were from the rural districts.

23	patients	suffered	from	scarlet	fever.
12	„	„	„	enteric	fever.
6	„	„	„	diphtheria.	•
6	„	„	„	measles.	

It is satisfactory to report that all the cases made a good recovery.

The two additional wings begun in 1895 were completed last year, and were found most useful in enabling cases of diphtheria to be treated with a separate nurse apart from patients in the other parts of the hospital.

In December the Urban District Council passed a resolution to meet the Guardians of the Goole Union to consider whether a separate hospital should be provided for the treatment of cases of small-pox. It would conduce very much to the safety of the whole district if some such means were now arranged, instead of waiting until cases of that disease break out.

SANITARY WORK.

There is no matter connected with the care of the health Water supply of the inhabitants in Goole which caused more anxiety last year than the water supply. After the completion of the new bore-hole it was confidently expected that an abundant supply of good water would be obtained. There is plenty of water, but as it is delivered it is frequently very much discoloured. The cause or causes of this condition has engaged again and again the attention of the Gas and Water Committee. The water has been analysed, and also the sediment which is thrown down. The result of both analyses goes to show that the water, however objectionable it is when discoloured, is not fouled or polluted by any material which is derived from either animal or vegetable matter. The discolouration, I believe, is due to very fine sand and clay worn off the sides of the bore-hole by the action of the water in the process of pumping; that matter driven with great pressure along the water mains and service pipes causes in turn some friction along these pipes, and sets free some part of the sediment, which contains a little iron, with which they are coated. A similar condition of water is sometimes met with in other districts where the water is also obtained from deep wells in the red sandstone rock. Their experience is that the amount of sediment steadily lessens the longer the water is pumped up. To meet the present difficulty the Committee ordered a systematic night by night flushing of the water mains. That was invariably followed by the water being cleansed for a time. The flushing is still continued.

The work of reversing the outlet of the sewers in the Sewers. streets opening out of Pasture Road was last year completed; also the covering over of the Hook drains. The North Eastern Railway Company were called upon to cover in their portion up to the the Alexandra Street Schools. The work of flushing the water mains previously noted has been of considerable benefit to the sewers.

Public Slaughter House.

Terms were arranged in the Autumn for the Council to become tenants of the slaughter house in Bridge Street. Considerable improvements are being carried out, and before the end of 1896 the premises were again used. During part of last year, animals were slaughtered and dressed for human food in very unsuitable places. Several proposals to erect new, or to convert existing buildings into private slaughter houses were sent in to the Council, but as they were considered highly objectionable on several grounds they were rejected.

Public Baths.

The Council have considered the question of providing public baths. Different sites have been suggested, but the important question of a suitable one at a reasonable price has not yet been settled.

Bye-laws and New Buildings.

The new bye-laws for buildings, &c., have been carefully considered by a Committee, and by the Council. They now await a final revision before being sent to the Local Government Board for approval.

Of the seventy new houses for which plans were passed last year, sixty were to be built in the West ward. This large increase of new houses shows that it is fair to allow for a yearly growth of the population beyond what the mere excess of the births over the deaths would regulate.

Houses closed as unfit for Habitation.

Five houses—more properly termed cellar dwellings—were reported as being so defective from damp and want of air, and also so dilapidated as to be unfit for human habitation. These were afterwards inspected by a Committee, and an order made that they should not again be occupied. Another group of four were also reported upon as being in a very unsanitary state. These the owners promised to have thoroughly repaired.

Yard and Back Street Paving.

The paving of many of the yards in which there are several houses is in a very defective state. During wet weather especially the surfaces are in a very unsanitary state; the same remarks apply to the great majority of the back streets, and as the Council has ordered the Sanitary Inspector to serve notices wherever such nuisances exist in back streets, this matter will be dealt with; while the better paving of back yards will be more easily regulated on the completion of the new bye-laws.

Canal Boats.

In Goole we are deeply interested in the health of those living on board the canal boats. It is not always remembered that many persons find a temporary home at least on board these boats. Last year 755 persons—men, women, and children—were found on the 232 boats inspected. One case of enteric fever was notified from a boat. The patient was removed to the hospital.

Among the requirements not observed on the boats inspected, only six had regard to the need of better ventilation or cleansing of the cabins.

The scavenging of house refuse and the contents of box closets continues to be well carried out. A good system has been adopted, and the workmen know that so much of the work has to be done every week, viz., cleansing of all box closets and boxes for dry refuse; and another part every month, viz., the removal of all midden refuse. The work is thus easily carried out, and as easily followed up by inspection. Scavenging of
Closets, &c.

Fifty cowsheds and dairies are registered. Among recent ones an endeavour is made to obtain more favourable sanitary surroundings than are found about those first registered. Dairies and
Cowsheds.

I think it was unfortunate for the people in Goole that the proposal to carry out the Adulteration Acts so far as taking samples of milk fell through. Every populous district finds that work very necessary in the interests of the ratepayers.

Very few additional workshops are registered. Those most frequently inspected are as a rule fairly satisfactory.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON, M.D.,

MEDICAL OFFICER OF HEALTH.

Goole, February 10th, 1897.

TABLE I.
LIST OF NUISANCES ABATED, AND STRUCTURAL ALTERATIONS
MADE DURING THE YEAR 1896.

No. of Inspections made	...	...	...	...	2472
„ Verbal notices given	...	...	...	...	84
„ Written notices served	...	...	...	...	119
„ Notices complied with	...	...	...	...	196
„ Nuisances partly abated or in progress	...	...	...	...	7

The Nuisances abated include :—

No. of House drains repaired and defects remedied	...	...	...	...	145
„ Sinks and Cisterns disconnected from drains	...	...	...	...	5
„ Trapped Gullies fixed instead of Cesspools	...	...	...	...	18
„ Houses disinfected and cleansed	...	...	...	...	56
„ Houses overcrowded	...	...	...	...	1
„ Other Nuisances abated	...	...	...	...	32
„ Manure Heaps removed	...	...	...	...	12
„ Closets and Ash-pits repaired	...	...	...	...	51
„ Closets and Ash-pits emptied monthly	...	...	...	...	892
„ Box Closets and Dry Ash-pits emptied weekly	...	...	...	...	2703
„ Dry Ash-boxes emptied every week	...	...	...	...	228
„ Loads of Night-soil removed	...	...	...	...	8130
„ Canal Boats examined	...	...	...	...	232

To hold Aft, 501½; Forward, 248 persons.

„ Boats on Goole Register	...	...	...	...	784
„ „ Registered in 1896	...	...	...	...	11
„ Regulations cancelled	...	...	...	...	49
„ Canal Boats Notices served	...	...	...	...	6
„ „ Letters as to	...	...	...	...	76
„ „ Not Registered	...	...	...	...	4
„ „ Change of Owners not notified	...	...	...	...	18
„ „ Requiring better ventilation, cleansing, &c	...	...	...	...	6
„ „ Transfer of Ownership and Certificate	...	...	...	...	32
„ „ „ Captain's and Boat's Names	...	...	...	...	8
„ „ Duplicate Certificate provided	...	...	...	...	11
„ Houses now supplied with Town Water	...	...	...	...	3154
„ Cow-sheds, Diaries, and Milk-shops registered	...	...	...	...	50
„ Common Lodging-houses inspected	...	...	...	...	5
„ Bodies placed in Mortuary	...	...	...	...	6

W. H. ELLIS, INSPECTOR.

TABLE II.
BIRTH AND DEATH RATES IN GOOLE IN 1896, AND FOR THE PREVIOUS FIVE YEARS, COMPARED
WITH THOSE OF THE WHOLE COUNTRY.

Year.	Rate per 1000 of the Population.						Deaths in Infants per 1000 Births.	
	Births.		Deaths.		Deaths from Zymotic Diseases.			
	Goole.	England and Wales.	Goole.	England and Wales.	Goole.	England and Wales.	Goole.	England and Wales.
	1896	36·2	29·7	15·8	17·1	2·3	2·1	151	148
1895	36·0	30·3	18·8	18·7	2·8	2·14	161	161
1894	35·8	29·6	18·9	16·6	3·5	1·7	150	137
1893	36·6	30·8	17·4	19·2	3·0	2·4	187	159
1892	39·6	30·5	16·6	19·0	1·9	1·9	152	148
1891	38·7	31·4	17·5	20·2	0·9	1·8	141	149

DEATHS FROM THE PRINCIPAL ZYMOTIC DISEASES IN 1896, AND DURING THE FIVE PREVIOUS YEARS.

TABLE III.

	1896	1895	1894	1893	1892	1891
Small-Pox	0	0	0	3	0	0
Scarlet Fever.....	0	8	3	1	0	2
Membranous Croup	0	1	2	2	2	0
Diphtheria	5	10	6	2	1	1
Fever, Enteric.....	1	2	1	3	3	6
Puerperal Fever.....	1	1	1	1	1	0
Measles.....	15	0	21	0	7	0
Whooping Cough	5	11	20	2	18	2
Diarrhœa.....	13	16	4	33	3	4
Total.....	40	49	58	47	35	15
Rate per 1000.....	2.3	2.8	3.5	2.9	1.9	0.9

TABLE IV.

DEATHS IN 1896 FROM SEVERAL GROUPS OF DISEASES, CHIEFLY AMONG CHILDREN UNDER FIVE YEARS OF AGE.

	Total.	Deaths per 1000 of Population.	Proportion of Deaths in every 1000 from all causes.
1.—Seven principal Zymotic Diseases.....	40	2·3	140
2.—Pulmonary Diseases	51	2·9	177
3.—Tubercular Diseases.....	27	1·5	93
4.—Wasting Diseases of Infants.....	32	1·8	111
5.—Convulsive Diseases of Infants.....	14	0·8	46

- 1. Includes Measles, Scarlet Fever, Whooping Cough, Enteric and Continued Fevers, Diphtheria, Membranous Croup, and Diarrhœa.
- 2. " Bronchitis, Pneumonia, Pleurisy, and Asthma.
- 3. " Phthisis, Scrofula, Tabes-Mesenterica.
- 4. " Marasmus, Atrophy, Debility, and Premature Birth.
- 5. " Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

TABLE V.

SUMMARY OF CASES TREATED IN THE FEVER HOSPITAL, GOOLE, DURING 1896.

DISEASES.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Recov- eries.	Died.
Scarlet Fever -	1	1	2		4	4		2	2	5	1	1	23	
Enteric Fever -	1	4		1			1		1	3	1		12	
Diphtheria -			1	1				3			1		6	
Measles - - -			3	1	2								6	
Totals - - -	2	5	6	3	6	4	1	5	3	8	3	1	47	0

TABLE A.

TABLE OF DEATHS, during the year 1896, in the Urban Sanitary District of Goole, classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES adopted for the purposes of these statistics; public in- stitutions being shown as separate localities.	Mortality from all causes at subjoined ages.								Mortality from subjoined causes, distinguishing deaths of Children under Five Years of Age.																	
	At all Ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Small-Pox.	Scarlatina.	Diphtheria.	Membrs. Croup.	Enteric or Typhoid Fever.	Puerperal Fever.	Measles.	Whooping Cough	Diarrhoea.	Erysipelas.	Rheumatic Fever	Ague.	Phtthisis.	Bronchitis, and Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases	Total.
Goole Town	254	95	46	9	9	62	33	Under 5 5 upwds	...	2	...	...	1	...	15	5	13	...	...	5	33	1	1	66	141
The Cottage Hospital	3	2	1	...	Under 5 5 upwds	2	1	...	113
The Fever Hospital	Under 5 5 upwds
The Workhouse	31	1	1	...	...	8	21	Under 5 5 upwds	...	...	...	...	...	...	...	...	...	3	...	...	...	2	4	20	29
Totals	288	96	47	9	11	71	54	Under 5 5 upwds	...	2	...	1	...	15	5	13	...	...	...	5	33	1	1	68	143
								Under 5 5 upwds	...	3	...	1	...	...	...	...	...	16	...	...	18	21	12	73	145

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring within the District among persons not belonging thereto.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	11	1	...	...	...	1	9	Under 5	5 upwds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10

TABLE B.

TABLE OF POPULATION, BIRTHS, and of NEW CASES of SICKNESS coming to the knowledge of the Medical Officer of Health during the year 1896, in the Urban Sanitary District of Goole; classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES, adopted for the purpose of Statistics; Public Institutions being shown as separate localities.	Population at all ages		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each locality coming to the knowledge of the Medical Officer of Health.						Number of Cases removed from their homes in the several localities for treatment in Isolation Hospital.			
	Census 1891.	Estimated middle of 1896.			Scarlatina.	Diphtheria.	Membranous Croup.	Enteric or Typhoid Fever.	Puerperal Fever.	Erysipelas.	Small-Pox.	Scarlatina.	Diphtheria.	Enteric or Typhoid Fever.
Goole Town	15308	17392	635	Under 5 5 upwds	13 28	4 11	1 ..	1 14	.. 3	.. 15	..	4 12	.. 3	1 9
The Fever Hospital ..				Under 5 5 upwds	..	..	..	.. 1	..	..	..	..	..	.. 1
The Workhouse	108	108		Under 5 5 upwds	..	..	..	.. 1	..	.. 1	..	..	..	.. 1
Totals	15416	17500	635	Under 5 5 upwds	13 28	4 11	1 ..	1 16	.. 3	.. 16	..	4 12	.. 3	1 11

“Notification of Infectious Disease” is compulsory in the District since 9th December, 1889.
The name of the Isolation Hospital used by the sick in the District is the Fever Hospital.

RICCALL
RURAL DISTRICT COUNCIL.

SELBY:
W. B. BELLERBY & SON, PRINTERS, BOOKSELLERS, &c.

1897.

RICCALL RURAL DISTRICT COUNCIL.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR 1896.

POPULATION IN 1896	...	...	...	...	3,126
AREA IN ACRES	...	...	...	...	16,735

TO THE RICCALL RURAL DISTRICT
COUNCIL.

GENTLEMEN,

It is now my duty to present to you my Annual Report for 1896.

The population at the Census taken in 1891 of the Riccall Population. Districts was 3,125, there have been no changes taken place during the year to make any marked difference, and it may therefore be considered as stationary ; the increase of the births over the deaths each year will probably make up for removals from the district.

Birth and
Death Rates.

Last year 90 births were registered—males, 44 ; females, 46. The birth-rate was 28·7 per 1,000 ; in 1895 it was 31. In Barlby parish the birth-rate was 36 ; in Cliffe, only 20·3 ; and in Riccall, 28·5.

55 deaths were registered—males, 25 ; females, 30. The death-rate was 17·5 per 1,000 ; while the average of several years is nearly 15. The increased rate is partly explained by an excess in the number of deaths in Barlby parish, where the death-rate last year was nearly 25 per 1,000 (24·8) ; in Riccall it was 16·3 ; and in Cliffe, 15·6. The only deaths registered from diseases usually included in the zymotic group were one from puerperal fever, and one from diarrhœa. Considering that the population of the district exceeds 3,000, it is very pleasing to note that there have been no deaths from any of the infectious group of diseases last year. The question of providing some means of isolating infectious cases made no progress last year, no further meeting with the York rural authorities having taken place.

The higher death rate in 1896 was chiefly caused by deaths from diseases of the lungs. There were 13, 3 were caused by phthisis, or consumption, and 10 by bronchitis, &c. The death-rate was 4 per 1,000. The number of deaths in this group was more than double those reported in 1895. In Barlby parish deaths from diseases of the lungs caused a death-rate of 6·7 ; in Cliffe, 6·2 ; and in Riccall of 4 per 1,000.

Deaths among infants under one year equalled 13 per cent. of the births registered. In Riccall parish there were nearly 24 per cent. Nearly one-third of all the deaths during the year were of children under 5 years of age, while 40 per cent. of those who died had reached or exceeded the age of 65 years. This feature of many of the deaths being of aged people is common to many of the parishes.

A large proportion of the deaths last year were certified by the Coroner. These were 8, equal to 14 per cent. Four were returned as due to natural causes, in only one of these was it stated that death occurred suddenly (it is a very material question whether

medical aid was called in, and if so was it as early as it should have been) ; 3 were caused by some form of accident, and one was a case of suicide.

19 cases of infectious diseases were notified to me last year, they were :—

Cases of
Infectious
Disease
Notified.

15 cases of scarlet fever,
2 „ „ erysipelas,
1 „ „ diphtheria,
1 „ „ puerperal fever.

The 15 cases of scarlet fever occurred in 4 parishes, but two-thirds were at North Duffield. At the end of July the first case was reported there. From information given while making enquiries it was found that 3 cases were then ill in another house in the village. These had been considered to be cases of measles, and had been allowed to go out, subsequently 2 other families became infected ; and as there were no means of separating the infected persons in the houses, 7 cases occurred, and strong persuasions had to be used to induce the parents to try and keep the infection from other houses. The cases in other parishes were all in separate houses, and there was no further spread of the disease. The case of puerperal fever, of which the patient died, was suspected as having been begun by the infection of scarlet fever, which was then, and had been, prevalent for several weeks in the village.

The case of diphtheria was an adult, whose business took him a great deal away from home. There were no other cases in the neighbourhood then or since.

Cases of measles are not notified. In the early part of the year that disease became very prevalent in the villages of Cliffe, Kelfield, and Barlby. The outbreak in each case was of a mild type ; but as the absentees through illness rapidly increased certificates were granted for closing the Barlby and Kelfield Schools. In connection with these school matters, I may here anticipate that a better supply of drinking water has been obtained at the Kelfield School by sinking a borehole 142 feet deep. The school children and the tenants of several houses near are thus supplied

Measles.

with a more wholesome drinking water. The closet accommodation at the Cliffe Schools has also been greatly improved by removing old closets from near the School-house, and by the erection of 2 new others a safe distance from the school premises.

The sanitary work of last year has been carried out in part in each of the eight parishes which make up the Riccall District.

Water Supply.

The Water Supply has been repeatedly considered when fresh reports were presented; but the chief action taken is to clean out old wells. In Riccall there are 3 wells which are known to be polluted to a serious extent, and the waters are not safe to drink. These have been reported in previous years; 2 additional wells were also reported last year in that parish as yielding bad water. In my opinion no good results can be hoped for by the attempts made to clean out such wells. It is, however, very necessary that something should be done rather than wait until the infection of typhoid and other fever should be introduced and find a soil and water ready, and specially suitable for the disease germs to multiply in. 3 equally bad waters were reported upon from Barlby, 1 from Cliffe, and 1 from Kelfield. In the last parish a deep bore well has been sunk, and a similar work is the safest, and, probably the least expensive means of doing what is necessary. The sub-soil of all these parishes is especially suitable to allow of shallow wells being polluted; and what is more fortunate, it has been proved to yield by deep bore holes a sufficient supply of wholesome water. I would urge the Council to consider whether at least one bore well should not be sunk both at Riccall and at Barlby. Each would cost the ratepayers less than the money so frequently spent over cleaning out old wells, and the results would be a guide for future work.

New Sewers and Drains.

The drainage of each village, and the providing, wherever possible, of an outlet sewer for private house drains, is constantly being carried on. Nearly half a mile of sewers were either newly laid or re-laid last year, and considerable improvements have been carried out at Barlby and Riccall: while over 600 yds. of new drains were made by private means, and 200 yards lifted and re-laid, and so made efficient drains. The trapping of these house drains was also required in all cases, and the best method

by good earthenware gullies was carried out in 21 cases. In country districts cesspools, or rather small settling tanks, are needed in order to keep as much as possible of the heavier part of the sewage out of the ditches. These receptacles are always dangerous if placed near to a well, and their use should as far as possible be confined to the roadway or in fields.

The closet accommodation of the district is year by year being improved, the decencies of life, as well as the risks to health, are being considered. 7 closets were last year removed from near dwellinghouses, and 17 new closets, privies, and ashpits were built, and 2 box-closets were substituted for old midden closets.

The Council made an order requiring 2 houses, which were reported as being in a very unsanitary condition, to be closed as unfit for human habitation.

The consideration of bye-laws for new buildings was resumed by a Committee of the Council, who recommended a series which have also been adopted by two neighbouring Rural Councils. The Riccall Council adopted the bye-laws as recommended, and ordered them to be sent to the Local Government Board for their approval.

7 Canal Boats have been inspected, and these were found to comply with all the regulations. No women or children were on the boats, and no cases of any infectious disease were found on board any boat.

I remain, &c.,

J. MITCHELL WILSON,

SELBY,

Medical Officer.

25th Jan., 1897.

TABLE I.

TABLE SHEWING PARTICULARS OF NUISANCES ABATED AND SANITARY
WORK DONE IN THE RICCALL RURAL DISTRICT DURING
YEAR 1896.

Number of inspections made.. .. .	247
Number of nuisances found	58
Number of notices served	23
Number of water notices served	10
Old drains lifted and re-laid by Sanitary Authority ..	580 yds.
New drains laid by private owners	623 ,,
New drains laid by Sanitary Authority	184 ,,
Old drains lifted and re-laid by private owners	203 ,,
Old drains and water courses cleansed	3860 ,,
New privies and ashpits built	17
Old privies removed from dwelling-houses	7
Privies converted into box closets	2
Old privies repaired	3
Old wells deepened and repaired	1
Old wells cleansed	10
New pumps	6
New bored wells	1
New cesspools.. .. .	7
Old cesspools filled up	3
New gullies	21
Canal Boats inspected	7
Cow-sheds inspected	14
Houses condemned	2

The Cesspools and Gullies in the respective Parishes have been frequently cleansed during the year. The open dykes have also been attended to.

T. CHRISTIE, Inspector.

TABLE II.
STATISTICS FOR THE RURAL SANITARY DISTRICT OF RICCALL, 1896, AND AVERAGE
RATES DURING THE TEN YEARS, 1881-1890.

DISTRICT. 1896.	RATE PER 1,000 OF THE POPULATION.				Deaths under 1 to every 1,000 Births Registered.	Percentage of Deaths in Persons aged 65 years and over.
	Births.	Deaths.	From Zymotic Diseases.	From Respiratory Diseases.		
Riccall District.. ..	28·7	17·5	0·3	4·1	133	40
10 Years' Average	30·4	15·1	1·2	2·9		

TABLE III.
BIRTH AND DEATH RATES IN THE LARGEST PARISHES DURING 1896.

PARISHES.	POPULATION.	RATES PER 1,000 OF THE AVERAGE POPULATION.				Deaths under 1 year per 1,000 Births.
		Births	Deaths.	Zymotic Diseases.	Respiratory Diseases.	
Barlby	442	36.1	24.8	0.0	6.7	187
Cliffe	640	20.3	15.6	0.0	6.0	76
Riccall	736	28.5	16.3	1.3	4.0	227

TABLE A.

TABLE OF DEATHS during the year 1896 in the Rural Sanitary District of Riccall, classified according to Diseases and Localities.

NAMES OF LOCALITIES.	Mortality from all causes.							Under 5 5 upwards	Mortality from subjoined causes, distinguishing deaths of Children under Five years of age.																				
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Small-pox	Scarlatina.	Diphtheria.	FEVERS.						Erysipelas.	Measles.	Whooping Cough	Diarrhoea and Dysentery.	Rheumatic Fever	Influenza.	Phthisis.	Bronchitis, and Pleurisy.	Heart Diseases.	Injuries.	All other Diseases	Total.
												Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.													
Riccal Sub-District ..	55	12	3	1	4	13	22	Under 5 5 upwards	..	..	..	..	..	1	..	..	..	..	1	..	..	3	5	3	1	8	15
Totals	55	12	3	1	4	13	22	Under 5 5 upwards	..	..	..	..	..	1	..	..	..	..	1	..	..	3	5	3	1	8	40
Deaths occurring outside the district among per- sons belonging thereto	1	..	..	..	..	..	1	Under 5 5 upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1

TABLE B.

TABLE of POPULATION, BIRTHS, and of NEW CASES of SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Riccall Rural District ; classified according to Diseases and Localities.

NAME OF LOCALITIES.	Population at all ages. Census, 1891.	Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.										
				FEVER.										
				Smallpox.	Scarlatina.	Diphtheria.	Membraneous Croup	Typhus.	Enteric or Tyhoid.	Continued	Relapsing.	Puerperal.	Cholera.	Erysipelas.
Riccall District.. . . .	3126	90	Under 5 5 upwards.	.....	4 11	1	.....	.....	.....	.....	.....	.....	.....	.....
Totals	3126	90	Under 5 5 upwards.	.....	4 11	1	.....	.....	.....	.....	.....	.....	.....	.....

Notification of Infectious Disease is compulsory in the District since 1st December, 1889.

There is no Isolation Hospital in or used by the Sick of the District.

SELBY

RURAL DISTRICT COUNCIL.

SELBY

RURAL DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH FOR 1896.

POPULATION IN 1896 5,950

AREA IN ACRES 34,726

SUB-REGISTRATION DISTRICTS :—				POPULATION.	AREA IN ACRES.	
CARLTON	...	...	...	2,261	...	13,293
SELBY-RURAL	...	...	...	3,689	...	21,433

TO THE SELBY RURAL DISTRICT COUNCIL.

GENTLEMEN,

I have now to present my Annual Report for 1896.

There has been no special alteration during the year in the Population. District, and my estimate of the population remains as in the previous year, viz.: 5950, and the area 34,726 acres. There are 19 parishes in the district, all situated in the West Riding and divided into 2 registration Sub-districts.

One hundred and sixty-one births (78 males and 83 females) were registered in 1895; the birth rate was 26 per 1000.

In the Carlton Sub-district the births equalled 29·3 per 1000, in the Selby Sub-district the rate was only 24·5. In Carlton parish the birth rate was 33; in Wistow, 22; in Cawood, Hambleton, and Brayton, the other parishes, having the largest populations the birth rate in these was only 20 per 1000, or even less.

Eighty-four deaths (47 males and 37 females) were registered in the rural districts, and one person belonging to these districts died at the Workhouse in Selby, the total number 85, is equal to a death rate of 13·8 per 1000. That is a very exceptional return.

In the Carlton Sub-districts the death rate was 17·3 per 1000, and in the Selby Rural Sub-district only 12 per 1000. In the separate parishes there was a corresponding low death rate, the highest was 15 per 1000 in Cawood and the lowest was in the next village, Wistow, where it was only 6 per 1000.

The only deaths from diseases of the zymotic class were 3, viz.: one each from scarlet fever, measles, and from diarrhœa; these all occurred in separate parishes in the Selby Rural Sub-districts.

From all forms of disease of the lungs there were 7 deaths, 3 from phthisis or consumption and 4 from bronchitis.

In both these groups the number of deaths was very much under the usual average.

Among infants under one year the proportion of deaths was 74 per 1000. In the Carlton Sub-districts the proportion was 76; in the Selby Sub-districts, 73. Among persons aged 65 and over the number of deaths equalled 38 per cent. of the total number registered.

The cause of death in 5 cases was not certified by any medical attendant, the ages of these were 83 years, 6 years, 6 years, 10 months, and one day.

Ten deaths were certified by the Coroner, 6 were caused by some accident, while 4 were returned as due to natural causes; thus nearly 11 per cent. of deaths registered in these districts during the year were not certified by any doctor, and 7 per cent. were due to some form of violent death.

During 1896 there were very few cases of infectious disease notified :— Infectious Diseases.

5 were cases of scarlet fever.

3 „ „ enteric fever.

2 „ „ diphtheria.

In only one house was there more than one case, in that family the illness was only detected to be due to scarlet fever when the children were found to be peeling.

In another case the death of a child was registered from “croup,” and 4 days after another child in the same house died from “malignant scarlet fever.”

The 3 cases of enteric fever occurred in parishes widely separated, and in none was I able definitely to trace a cause for the illness. I must again note what is an old experience in these districts, viz. : that 2 of the 3 cases reported regularly drank water from the rivers, one from the Ouse and the other from the Aire. Both rivers are well known to be polluted with domestic sewage, which must convey disease germs, and although there is great dilution in the volume of water that cannot be trusted to remove all risk. Enteric Fever.

The 2 cases of diphtheria occurred in the same week in different parishes; at or very near each house there were unsanitary conditions, which I believe changes in the weather made more offensive at the time and so induced the illness. Diphtheria.

Cases of measles are not notified; throughout the earlier parts of the year, outbreaks of that disease attacked the school children in the parishes of Brayton, Burn, Drax, Langrick, Carlton, Cawood, and Chapel Haddlesey. Only one death was caused by measles, so that the disease was generally of a mild type. The infection as a rule was readily traceable from one village to another by means of the school children. Visitors recovering from the disease brought the infection; these and others in our own districts have been allowed to mix with others while still liable to give the infection. The work of pea-pulling was also strongly suspected as causing a recurrence of the disease after the epidemic had apparently ceased. Although the disease Measles.

was not of a severe kind, yet a large number of school children were either attacked or lived in the same house and were therefore equally kept from school, and so the attendance was greatly lessened. It was considered the most effectual way of stopping the disease and also of assisting the work of the Managers by closing four of the schools for several weeks. In other schools the cases were not so numerous, and certificates were given for individual children for the time they had been kept from school.

The question of providing a hospital for cases of infectious disease has again been under the consideration of a Joint Committee of the Rural and Urban District Councils.

Bye-laws for
New Buildings.

While new houses were being erected in Hambleton, Carlton, and Hirst, it was thought right that the owners' attention should be drawn to matters which were objectionable, although there were no bye-laws adopted. Following upon that action, part of the works had to be altered; the Council have recently adopted a set of bye-laws relating to new streets and buildings which had been considered by a Committee; these bye-laws now wait the approval of the Local Government Board.

Inspection of
Workshops.

Another matter which has is new in these districts is the registration and inspection of workshops. These are required to be registered by the Factory Inspector of the district (Mr. J. A. Hine, Bradford). Notice of these premises, when registered, are sent to the Council in order that their sanitary condition may be inspected. Such trades as basketmaking, tailors, dressmaking, wheelwrights, have been inspected and explanations given as to the objects intended, and what was required from the tenants.

Water Supply.

Of the sanitary work considered by the Council during the year, the water supply may claim to be the most important. Although only a very few cases of typhoid fever were reported last year, yet our care for the water supply ought not to be less on that account. Every year's history repeats, in some districts, the story of a well subject to being fouled from its surroundings, becoming the cause of an outbreak of fever after infected matter had reached the water by the same channels as conveyed to it before the non-infected matter from the drain or ashpit. I have already repeated a warning against the use for drinking of the

water from the rivers. The Aire is very little better than a sewer and the Ouse gets mixed with the same foul liquid by the tidal waters.

In Newland parish on the river bank there is no well water available, and two or three wells are urgently required.

At Church End, Cawood, also, the inhabitants have only the river as their supply, and they would probably persist in using that water even if a better were obtained. There would be less danger, however, if they could be induced to boil all such water before it was drunk.

Of the 8 well waters I analysed last year, 6 were found to be Wells. dangerously polluted.

The notices, regarding these impure well waters, sent by the Council are often not attended to by the owners until another inspection or a heavy rain fall again shows how unfit the water is to be used. If greater attention was paid to the condition of the pump and also of the well cover, some of the causes of the water being polluted would be prevented; but every year some better supply is provided in different parishes, *e.g.*, last year one house was supplied with water from the Selby Town mains, 2 new tube wells and 5 brick wells were made, while 9 old wells were cleansed, and one was deepened and a better supply obtained.

Seven hundred and two yards of new sewers were laid in the parishes of Burn, Camblesforth, and Hambleton; these provide a better means of disposing of the drainage of houses. Sewers and Drains.

In the parishes of Burn, Camblesforth, and Hambleton extensions of the existing sewers were made, amounting in all to 700 yards. As new houses are built or the old cesspools become objectionable or from danger to the water supply these new sewers are needed, to which junctions are made from private houses. This work of providing better means of carrying off the domestic sewage is not overlooked even in a purely agricultural district, for in 14 out of the 18 parishes in the district, over 1500 yards of new drains were laid or relaid by private owners last year; properly trapped gullies were provided, and to meet the requirements of isolated houses 13 new cesspools were built.

Settling tanks were also required to be provided in the case of large works, so that all solid matter should be allowed to settle or be strained off before the refuse was discharged into the public sewer. A number of houses at the West end of Drax have no sewer to which they can be connected. The Inspector and I met a Local Committee twice there and the most likely means of providing an outlet agreed upon. The carrying out of the work was delayed until the spring.

The Council have had some difficulty in preserving the flow of the water from outside this district in the dyke at Hambleton; for flushing purposes that water is very valuable, seeing that it is the highest end of the length of the open drain in these districts. The outlet drain from the Cemetery at Cawood has had to be repaired temporarily, until a new and larger drain can be relaid.

Closets and
Ashpits.

The closet accommodation is year by year improved, either by additional closets and ashpits being provided for existing houses, or by the removal of these to a greater distance from the house or from the well. Two removable box closets were provided for houses at Carlton. In the same village a similar sanitary improvement is greatly needed at the National Schools, to take the place of a large foul cesspit from which the contents have only been removed at an interval of several years.

After a long delay, the house at Newland which was condemned in the previous year as unfit to be occupied, is now empty, and as it is dangerous and its surroundings are a nuisance to others, I think it ought to be pulled down.

No complaints have been made as to the condition of the 14 Canal Boats inspected.

The 14 Cowsheds on the register have also been visited and found in a satisfactory state.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON, M.D.,

Dip. Public Health, Cambs.,

MEDICAL OFFICER OF HEALTH.

SELBY, 4th January, 1897.

TABLE I.

TABLE SHOWING PARTICULARS OF NUISANCES ABATED AND SANITARY
WORK DONE IN THE SELBY RURAL DISTRICT DURING
YEAR 1896.

Number of inspections made	...	...	...	...	218
Number of nuisances found	...	...	...	...	75
Number of notices served	...	...	...	...	34
Number of water notices served	...	...	...	...	7
New sewers laid by Sanitary Authority	...	...	...	...	702 yds.
New drains laid by private owners	...	...	...	...	978 „
Old drains lifted and re-laid by private owners	...	...	...	...	550 „
Old drains and water courses cleansed...	...	...	...	...	3860 „
New privies and ashpits built	...	...	...	...	18
Privies converted into box closets	...	...	...	...	2
Privies and ashpits repaired or covered	...	...	...	...	5
Old privies removed from dwelling-houses	...	...	...	...	7
New bored wells	...	...	...	...	1
New brick wells	...	...	...	...	5
Old wells deepened or cleansed...	...	...	...	...	10
New pumps	...	...	...	...	6
New cesspools	...	...	...	...	13
Old cesspools filled up	...	...	...	...	3
Old cesspools repaired	...	...	...	...	3
New gullies	...	...	...	...	28
Canal boats inspected	...	...	...	...	14
Daires and cow-sheds inspected	...	...	...	...	14
House closed as unfit for habitation	...	...	...	...	1

The many Cesspools and Gullies in the respective Parishes in this District have been frequently cleansed during the year. The open Dykes have also been attended to, some of them having been deepened.

T. CHRISTIE, Inspector.

TABLE II.

STATISTICS FOR THE RURAL SANITARY DISTRICT OF SELBY AND THE SUB-
REGISTRATION DISTRICTS, 1896.

RURAL SANITARY DISTRICT AND SUB-DISTRICTS.	RATE PER 1,000 OF THE POPULATION.				Deaths under 1 to every 1,000 Births Registered.	Percentage of Deaths among Persons aged 65 and over.
	Births.	Deaths.	From Zymotic Diseases.	From Respiratory Diseases.		
Rural Sanitary District ...	26	13·8	0·5	1·1	74	38
Carlton Sub-district ...	29·3	17·3	0·0	1·3	76	40
Selby Sub-district ...	24·5	11·6	0·8	1·0	73	26

TABLE III.
BIRTH AND DEATH RATES IN THE LARGEST PARISHES, DURING 1896.

PARISHES.	POPULATION	RATE PER 1000 OF THE AVERAGE POPULATION.	
		BIRTHS.	DEATHS.
Brayton	500	8·0	12·0
Carlton... ..	759	33·0	10·0
Cawood... ..	1000	20·0	15·0
Hambleton	489	16·0	14·0
Wistow... ..	674	22·0	6·0

TABLE B.

TABLE of POPULATION, BIRTHS, and of NEW CASES of SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1896 in the Rural Sanitary District of Selby; classified according to Diseases and Localities.

NAMES OF LOCALITIES.	Population at all ages, Census 1891.	Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.							
				Scarlatina.	Diphtheria.	Membranous Group	FEVER.				
							Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.
Carlton Sub-District	2261	66	Under 5 5 upwards	1 3	..... .....	..... .....	..... .....	..... 1	..........	..........	..........
Selby Sub-District	3689	95	Under 5 5 upwards	..... 1	..... 2	..... .....	..... .....	1 1	..........	..........	..........
Totals	5950	161	Under 5 5 upwards	1 4	..... 2	..... .....	..... .....	1 2	..........	..........	..........

Notification of Infectious Disease is compulsory in the district since 1st December, 1889.
There is no Isolation Hospital in or used by the Sick of the district.

SELBY
URBAN DISTRICT COUNCIL.

SELBY :
W. B. BELLERBY & SON, PRINTERS, BOOKSELLERS, &c.

1897.

SELBY

URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH FOR 1896.

POPULATION, CENSUS, 1891	6,022
ESTIMATED POPULATION IN 1896.. .. .	6,250
AREA IN ACRES.. .. .	3,757

TO THE SELBY URBAN DISTRICT COUNCIL.

GENTLEMEN,

It is now my duty to present to you my Annual Report for 1896. I have calculated the population of the district to be 6,250 up to the middle of last year.

The births registered during the whole of 1896 were 188, males Births. 96, females 92; the birth-rate was 29 per 1,000. The average rate during the previous 5 years was 32. The birth-rate for the whole of England and Wales last year was, with one exception, the lowest yet recorded, it was 29·7.

Deaths. There were 117 deaths registered in the town—males 65, females 52. Three of these were of strangers to the town; the corrected number—114 was equal to a death-rate of 18·0 per 1,000; the average rate of the 3 previous years was 18·4. The death-rate for the whole country was 17.

The reason why Selby did not share to the full extent in the general lowering of the death-rate in the whole country last year is explained in the next paragraph.

From zymotic, or infectious diseases, there were 25 deaths :—

11 were caused by Measles.

8 „ „ „ Diarrhœa.

3 „ „ „ Enteric Fever.

3 „ „ „ Whooping Cough.

The death-rate from these was 4·0 per 1,000, which is double the average rate of the previous five years.

From phthisis, or consumption, 6 deaths were registered. From other diseases of the lungs, such as bronchitis, pneumonia, &c., there were 23 deaths. The death-rate represented by these 29 were 4·6 per 1,000; that rate also exceeded the previous average.

Influenza, with disease of the lungs, was registered as the cause of two deaths.

Deaths at
Different Ages.

The deaths among infants under one year were in the proportion of 180 per 1,000 registered births, as compared with an average of 146. Of all the deaths last year 44 per cent. were among children under 5 years of age, and 17 per cent. were of persons who had reached 65 years or over that age. Three deaths were registered on the coroner's certificate; 2 of these followed upon accidents. The deaths of two infants aged 9 and 10 months were not certified either by a doctor or the coroner.

Infectious
Diseases
Notified.

During 1896, 22 cases of infectious diseases were notified :—

14 were cases of Scarlet Fever.

3 „ „ „ Enteric Fever.

3 „ „ „ Erysipelas.

1 was a case of Diphtheria.

1 „ „ „ Choleraic Diarrhœa.

During the first half of the year there were very few cases of Scarlet Fever. scarlet fever. In August two cases were reported from one house, but no certain history of the origin of the infection was obtainable. Very soon after a fresh infection was introduced, and 10 cases were reported in four houses in September. These cases were all nursed at their own houses ; in one house there were 4 cases, in two others 2 each, and the disease was confined to one child in two houses. All the cases recovered.

A very unusual experience was met with in the cases of enteric Enteric Fever. fever reported, for each of the three cases died. They were not in any way associated, for they occurred in April, in June, and in August ; and lived in houses widely apart. There was a history of previous illness in all of them ; and in one death followed three days after the notice of fever was received, yet, about that patient's house no unsanitary or other condition existed which might have originated the specific fever. A second case was brought home ailing, while the third died three months after the case was reported.

The case of diphtheria was isolated and no other followed.

Cases of measles were very prevalent in Selby last year during Measles. the months of April, May, and June. It would be impossible to give a correct idea of the number of children who were attacked, but 11 deaths were registered as due to measles, and in the great majority of these there was also some acute disease of the lungs which followed upon the attack of measles. The death-rate from measles per 1,000 of the population was five times the usual rate among the population of England and Wales, excluding the large towns. It is an important matter to note how very fatal attacks of measles are to young children, for 8 of the 11 deaths were among those under 3 years of age. I was first informed of the outbreak at one of the day schools, where the attendance of the children had been greatly lessened. It very frequently happens that children return to school far too soon after an attack of measles, and there is not a very careful exclusion of other scholars from the same house while the illness lasts. The Council, after receiving my report, ordered that the masters and mistresses should be advised on this matter, and as the school

attendance suffered severely when the enforced absence of all scholars was required, it was decided to close the chief schools for a few weeks. That action was beneficial to the schools, but a more rigid keeping away of all children from infected houses from the very first, and for a sufficiently long time to get rid of the infection, would be the more successful way of checking the spread of the disease. Measles in periodical outbreaks is more fatal than all the infectious diseases which are notified ; and even our recent experience showed that there was very lukewarm action taken by those chiefly interested to suppress the disease until the school attendance was seriously affected. Measles is not the trifling ailment it is commonly considered, but is a very fatal disease, especially among children under 3 years of age. In July and August there was an outbreak of diarrhœa, especially among the young, from which 8 children, all under one year, died. Inquiries were made at the different houses, and it was found that they were in all parts of the town, but it was difficult to find any special cause. As a matter of precaution drains and closets in use were disinfected. A severe case of choleraic diarrhœa in an adult was clearly due to unsuitable food.

SANITARY WORK.

Water Supply. In reporting upon the sanitary state of the town, it ought to be remembered that Selby is fortunate in having a supply of good water, the average consumption of which is equal to 25 gallons per head of the population per day. That amount must include a large amount wasted, for the Surveyor's report shows that 189 notices were served because of some form of waste being detected. The chief cause was through W.C.'s which are not provided with supply cisterns. A few additional closets are supplied with this necessary means of flushing year by year.

Sewers. The building of new houses called for the extension of the sewer for 90 yards in Armoury-lane, and 690 yards of a recently laid sewer was lifted and re-laid with a suitable fall. The Council gave special instructions during the summer months as to the systematic flushing of the sewers and common yard drains, also for filling up the street gullies with water. To avoid the cause of complaints it was also ordered that for the 3

summer months all scavenging of ashpits should be begun at 4 a.m. The want of closet accommodation at the coal wharfe, and the prevention of nuisances from cargoes of night-soil near the houses on the Canal were reported and remedied.

The adoption of box-closets for a group of houses has resulted in many complaints in spite of the weekly cleansing. Two houses were reported as being unfit to be occupied owing to serious sanitary defects. Notices were also served about other houses being overcrowded, or in a dirty or damp state. The results of visits paid to the slaughter-houses and bake-houses are that they were usually found in a satisfactory condition. Very few complaints are made in spite of many of the former being often near to houses.

Visits are paid to the registered workshops, and the sanitary conditions are looked after in accordance with the requirements of the Factory and Workshops Acts.

The following table, prepared by Mr. Gray, shows the result of inspections made through the town, and gives the details of the work which he has successfully carried out during the nine months he has held the office of Surveyor and Sanitary Inspector.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON, M.D.,

(Dip. Public Health, Cambs.,)

MEDICAL OFFICER OF HEALTH.

SELBY, 17th February, 1897.

TABLE I.

ANNUAL REPORT OF NUISANCES ABATED AND OTHER SANITARY
WORK FOR THE YEAR ENDING 31ST DECEMBER, 1896.

Inspections made	1600
Verbal and Written Notices from Inspector	222
Notices from the Council	13
New Sewers laid	90 yds.
Number of houses connected with new sewers	3
Sewers lifted and re-laid	690 yds.
Notices issued for waste of water (W.C.'s)	189
Defective drains cleansed and re-laid	7
Defective W.C.'s cleansed and repaired	10
Sinks disconnected	3
Defective and delapidated privies and ashpits rebuilt ..	64
W.C.'s provided with flushing cisterns	5
Ashpits, privies, etc., cleansed	4739
Number of loads of refuse removed	1275
New W.C.'s provided	16
Premises cleansed and limewashed	17
Houses unfit for habitation	2
Overcrowding abated	1
Notices served for dangerous buildings	2
Plans passed for buildings	10
Rooms disinfected	18
Dairies and cowsheds registered	25
Bake-houses registered	29
Common lodging-houses registered	5
Slaughter-houses registered	8
Workshops do.	7
Canal Boats inspected	41
Offensive accumulations removed	4
Yards repaired	2

BRUCE MCGREGOR GRAY,

Surveyor and Inspector.

TABLE II.

BIRTH and DEATH RATES during 1896, and Five Previous Years, in the Selby Urban Sanitary District, and in England and Wales.

Year.	Rate per 1000 of the Population.						Deaths in Children under 1 year to every 1000 Births.	
	Births.		Deaths.		Deaths from Zymotic Diseases.			
	Selby.	England and Wales.	Selby.	England and Wales.	Selby.	England and Wales.	Selby.	England and Wales.
1896	29·0	29·7	18·2	17·1	4·0	2·1	180	148
1895	33·2	30·3	18·0	18·7	4·3	2·1	189	161
1894	33·0	29·7	17·5	16·6	1·3	1·7	141	137
1893	30·8	30·8	21·2	19·2	1·4	2·0	139	159
1892	32·3	30·5	16·9	19·0	0·9	2·4	109	148
1891	30·5	31·4	18·4	20·2	1·8	1·8	152	149

TABLE III.

SUMMARY of the BIRTH and DEATH RATES during the 10 Years 1881-90.

	Average of the 10 years 1881-1890.
Birth Rate per 1000	31·2
Death „ „	18·4
From Zymotic Diseases	1·5
„ Phthisis or Consumption	1·4
„ other Lung Diseases.. .. .	2·9
Deaths in Infants under 1 year per 1000 births	133

TABLE IV.
MORTALITY FROM SEVERAL GROUPS OF DISEASES DURING 1896.

	Total.	Deaths per 1000 of Population.	Proportion of Deaths in every 1000 from all causes.
1.—Seven Principal Zymotic Diseases	25	4.0	213
2.—Pulmonary Diseases (other than Phthisis) ..	23	3.6	196
3.—Tubercular Diseases	8	1.3	68
4.—Wasting Diseases of Infants	10	1.6	85
5.—Convulsive Diseases of Infants	8	1.3	68

- 2.—Includes Bronchitis, Pneumonia, Pleurisy, and Asthma.
3.— " Phthisis, Scrofula, Tabes Mesenterica.
4.— " Marasmus, Atrophy, Debility, and Premature Birth.
5.— " Hydrocephalus, Meningitis, Convulsions, and Teething.

TABLE A.

TABLE OF DEATHS during the year 1896 in the Urban Sanitary District of Selby, classified according to Diseases, Ages and Localities.

NAMES OF LOCALITIES.	Mortality from all causes at subjoined ages.							Mortality from subjoined causes, distinguishing deaths of Children under Five years of age.																						
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	FEVERS.																						
								Small-pox	Scarlatina.	Diphtheria.	Membranous Group.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough	Diarrhoea and Dysentery.	Rheumatic Fever	Influenza.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Diseases.	Injuries.	All other Diseases.	Total.	
SELBY	106	34	17	8	4	26	17	Under 5 5 upwards	..	..	..	..	3	..	..	..	4	..	..	1	6	..	2	7	3	25	51	..	21	55
WORKHOUSE	11					4	7	Under 5 5 upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	10	11	..	..
Totals	117	34	17	8	4	30	24	Under 5 5 upwards	..	..	..	..	3	..	..	..	4	..	..	1	6	..	3	7	3	25	51	..	31	66
Deaths occurring within the district among persons not belonging thereto	3						3	Under 5 5 upwards.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	

TABLE B.

TABLE of POPULATION, BIRTHS, and of NEW CASES of INFECTIOUS SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Urban Sanitary District of SELBY; classified according to Diseases, Ages and Localities.

NAME OF LOCALITIES.	Population at all ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.																						
	Census, 1891.	1896			Smallpox.					Scarlatina.		Diphtheria.		Membranous Croup.		Typhus.		Enteric or Tyhoid.		Continued		Relapsing.		Puerperal.		Cholera.		Erysipelas.
SELBY LOCAL BOARD DISTRICT.	5922	6142	188	Under 5 5 upwards.	.....	4	10	1	.....	.....	3	.....	.....	.....	.....	1	3	.....	.....	.....	.....	.....	.....	1	3	.....	.....
WORKHOUSE	108	108		Under 5 5 upwards.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	6030	6250	188	Under 5 5 upwards.	.....	4	10	1	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3	.....	.....

Notification of Infectious Disease is compulsory in the District since 9th December, 1889.
There is no Hospital for cases of Infectious Disease.

TADCASTER

RURAL DISTRICT COUNCIL.

TADCASTER RURAL DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH FOR 1896.

POPULATION AT CENSUS, 1891	...	...	25,977
ESTIMATED POPULATION IN 1896	...	...	27,430
AREA OF DISTRICT IN ACRES	...	...	72,865

REGISTRATION SUB-DISTRICTS :—

ESTIMATED POPULATION.

	1895.	AREA.
ABERFORD	17,086	29,859
APPLETON ROEBUCK	5,568	25,038
TADCASTER	4,776	17,968

TO THE TADCASTER RURAL DISTRICT COUNCIL.

GENTLEMEN,

I have again to present to you my Annual Report which deals with the facts of the health of the district and the sanitary work of the year 1896.

I have estimated the population of the whole district as 27,430, a slight increase as compared with that of the previous year.

856 births were registered last year; males, 451; females, 405; Births. that number is 60 less than those registered in 1894. The birth rate last year was 31·2 per 1000 of the population; the average birth rate for the 10 years (1881-90) was 33·5.

Birth Rates.

In the Aberford sub-district the birth rate was 34·5 per 1,000.

„ Appleton Roebuck	„	„	22·2	„
„ Tadcaster	„	„	29·7	„

In the following parishes the birth rate was—

in Allerton Bywater	...	...	51·6	per 1,000.
„ Kippax	...	...	38·1	„
„ Great and Little Preston	...	...	35·1	„
„ Garforth	...	...	34·8	„
„ Tadcaster	...	...	31·7	„

In the remainder of the larger parishes the birth rate was considerably below the general average,

in South Milford it was	...	...	28·0	per 1,000.
„ Micklefield	„	...	26·0	„
„ Sherburn	„	...	21·7	„
„ Barwick	„	...	25·0	„

Death Rates.

The total number of deaths registered last year was 487; males, 290; females, 197; the death rate would be 17·7 per 1,000. It is necessary, before comparing that rate with the average of previous years, to recall the terrible calamity that occurred in Micklefield in April last, whereby 62 workmen lost their lives. I have made a separate calculation of the death rate in the whole district, in the Aberford sub-registration district and for the parish of Micklefield, deducting from each of the groups the 62 deaths, and have termed the lesser number the corrected or normal death rate. For the whole district that death rate was last year 15·4 per 1,000. In the returns from the Registrar General's Office, the average death rate in these districts during the years 1881-90 is given as 17·2 per 1,000; while with a smaller population the death rate of the years 1871-80 was 19·5. Everyone will readily see the normal death rate for the past year was considerably lower than either of these averages, and what will be considered more trustworthy is the steady reduction of that rate when calculated for a period of 10 years.

In the Aberford sub-district the uncorrected death rate was 18·4 per 1,000, but the normal rate was 15·1; in the Appleton sub-districts the death rate was 15·8; and in the Tadcaster sub-districts it was 15·4.

For the whole year, therefore, the deaths from ordinary causes in none of the districts exceeded 16 per 1,000.

The highest death rate in any parish was in Allerton Bywater where it was 22·4; in Garforth and Kippax, 18·0; in Preston and Tadcaster, 15·0; and in the remaining larger parishes it was under the general average of 15 per 1000. But in several parishes having a population under 500, the death rate considerably exceeded the general average, *e. g.*, in Church Fenton it was 30; in Bilbrough, 41; in Saxton and Scarthingwell, 28; and in Appleton Roebuck it was 20.

These death rates are excessive among a purely agricultural population, but happily they are exceptional and due to some special reason for the year only.

Last year 41 deaths were registered from the 7 principal zymotic diseases :—

Deaths from
Zymotic
Diseases.

From measles these were	...	...	...	14
„ diarrhoea	...	...	...	11
„ enteric fever	...	...	...	7
„ scarlet fever	...	...	...	3
„ whooping cough	...	...	...	2
„ membranous croup	...	...	...	2
„ puerperal fever	...	...	...	1
„ cholera (English)	...	...	...	1

The death rate from these was 1·4 per 1,000; the average rate for the standard 10 years was 2·6. In the Aberford sub-districts these deaths nearly equalled 2 per 1,000; but in the sub-districts of Appleton and Tadcaster there were exceptionally few deaths. The high death rate in Allerton Bywater, previously noted, was largely due to many deaths in this group, for the zymotic death rate was 5 per 1,000 due to fatal cases of measles and diarrhoea among children under 5 years of age.

There were 35 deaths from phthisis or consumption equal to a death rate of 1·2 per 1,000; from other diseases of the lungs, including bronchitis, pneumonia, &c., there were 62; the total number, 97, equalled a death rate of 3·5 per 1,000; the average rate for previous years was 4·4. The death rate from these diseases of the lungs was nearly alike in each of the sub-registration districts. In the townships of Garforth and Swillington the death rate in this group was 5 and 5·4 per 1,000; in Tadcaster and Preston it was 4. The large death rate in several of the parishes with a population under 500, is found to be due to deaths from diseases of the lungs. Among such small populations 1 or 2 extra deaths in any group makes a great difference when the ordinary calculations of this report are made, *e.g.*, in Bilbrough last year deaths from chest diseases equalled 17 per 1,000; in Appleton, 12; in Church Fenton, 8; and in Saxton 6 per 1,000 of the several populations. 6 deaths were registered as due to influenza, these were usually associated with some form of disease of the lungs or of the heart.

Deaths from
Diseases of the
Lungs.

When the ages of those who died during the year are examined it is found that infants under one year died in the proportion of 135 per 1,000 births registered; in the 3 sub-registration districts the proportion of these were, in the Appleton, 161; in the Tadcaster, 154; and in the Aberford, 125. In some of the parishes with the largest population this rate was considerably above the average; in Great and Little Preston it was 183; in Allerton, 160; and in Garforth, 156. One-third of all the deaths during the year were among children under 5 years of age, while 26 per cent. of the remainder died at the age of 65 years or

Deaths at
Different Ages.

above that age. In many of the parishes with a lesser population the proportion of those who died at the age of 65 or over, exceeds 50 per cent. or more.

Only 4 deaths were registered as cases not certified by a doctor or by the Coroner. 84 were returned on the Coroner's certificate; 14 of these were certified as due to natural causes; 70 resulted from some form of accident, of these 62 lost their lives through an explosion in the Micklefield pit.

CASES OF INFECTIOUS SICKNESS.

Cases of
Infectious
Diseases
notified.

During 1896, there were notified 122 cases of infectious disease, viz.: of

Scarlet fever there were	...	...	59 cases
Enteric fever	„	...	35 „
Continued fever	„	...	3 „
Puerperal fever	„	...	2 „
Diphtheria	„	...	4 „
Membranous croup	„	...	2 „
English Cholera	„	...	2 „
Erysipelas	„	...	15 „

There were fewer cases of scarlet fever and only one-fifth the number of cases of diphtheria reported last year as compared with 1895, but there was an increased number of cases of enteric fever.

Scarlet Fever.

The 59 cases of scarlet fever occurred in 9 parishes, the largest proportion in Great and Little Preston and Garforth. 24 of the cases occurred in 9 houses; in one house there were 5 cases, in another 4, in another 3, and in 6 houses there were 2 cases in each. These figures prove the great power of the infection of scarlet fever to spread when the illness is treated at home; in the ordinary cottage the accommodation is usually limited to 2 or at most 3 bedrooms, and the mother of the children does her utmost while she acts in the house as nurse and housekeeper to the rest of the household.

After the parents had refused our appeal to have the first cases removed to the hospital, several consented when the infection could spread no further in the house, and then there were received families of 5, 4, 3, and 2, when probably 4 early removals might have stopped the disease. These examples do not shew the best uses of the hospital. The object is to separate the sick one at the earliest opportunity and so try and prevent the whole household and neighbouring families becoming infected. During the year that prompt separation of cases of scarlet fever from several houses with families has been carried out, and no other case followed in these houses.

Among the 59 cases there were 3 deaths, equal to 5 per cent. of the persons attacked which is a favourable result.

There was no special cause for the occurrence of these cases in the several parishes, other than the constant occurrence of the infection being conveyed from some of the patients to others, and the increased liability to contract such illness among those who live amidst unsanitary surroundings. During 5 months no cases of scarlet fever could be admitted into the hospital because cases of enteric fever were being treated there, but during the remainder of the year, 33 cases were admitted.

35 cases of enteric fever were reported from 7 separate parishes. 15 of the cases occurred at Micklefield, 11 of the cases there were reported in July; that outbreak formed the subject of a special report in which it was fairly well shown that infected matter had gained an entrance into a well from which the supply for drinking was obtained, not only by the householders who resided near the well but also by children who attended the school from a distance and drank the water. No more cases of fever were reported from Micklefield after the well was closed. The control of the infection was very greatly assisted by the removal of all the cases to the hospital where everyone recovered. One of the cases which originated at Micklefield was removed to and died at his home at Garforth. Another death from that same fever was reported there, the patient, aged 73, being ill a very short time. 2 deaths from enteric fever occurred at one house at Allerton—between the bridges, the house was without through ventilation, the yard had an accumulation of house refuse from an over full midden, and at the time of the illness the river Aire was especially foul and stinking. Very soon after 2 fresh cases occurred at another house in Allerton, but both were removed to the hospital and recovered.

Cases of Enteric
Fever.

Among the few isolated cases that occurred in the parishes of Kippax, Tadcaster, and Barkston, the patients were found living amid very unfavourable sanitary conditions, while the history of others indicated an illness contracted outside these districts.

In each case the attention of the Council was drawn to the facts discovered, and suggestions have been made and adopted or are being further considered.

There were few cases of diphtheria in 1896, only 4, all in separate parishes. 3 of the cases were young children, the other an adult living in a greatly over-crowded and badly ventilated house. 2 children were also reported as ill of membranous croup; but from none of these cases of infectious sore throat did the disease spread.

Diphtheria.

On the same day, 2 cases of English cholera were reported in Tadcaster; one was a tramp who took ill in reaching the work-house, the other case was ailing for a week in the town; both sufferers were females over 70 years of age.

Cases of measles have been very prevalent in the parishes of Allerton, Kippax, and Preston, and 14 deaths have been caused

Measles.

by that disease. Isolation in the hospital has never been tried for cases of measles, and in spite of the large number of deaths, cases of measles are very commonly treated at their homes like cases of ordinary non-infectious sickness, and other children are sent to school from these houses while the illness is prevalent. I am not prepared to advise adding measles to the list of diseases which are notified, but some good would follow if a plan was arranged for reporting cases of measles by the sanitary officials and the schoolmasters and mistresses throughout the district. It would be for the benefit of the school to receive a certificate which would include all lost attendances of every child absent through this infectious disease, and more general disinfection would be required at the houses of the children.

Hospital Cases.

During the year the hospital at Garforth has been occupied throughout the whole year. 51 patients were admitted, 33 of these suffered from scarlet fever, the only fatal case was an infant 6 months old.

There were 18 cases of enteric fever and all of these recovered. The success of the hospital treatment it is to be hoped will go far to lessen the prejudice existing against friends being removed there. The sole object of the hospital is to serve the best interests of the ratepayers, and the results of the treatment of cases there show that the skilled nursing, suitable food, excellent situation, and good sanitary arrangements in and about the hospital, have been successful in carrying a far larger proportion of the cases safely through their illness than the best of home nursing has done.

SANITARY WORK.—WATER SUPPLY.

Tadcaster.

Following upon the inquiries in 1895, relative to the water supply in East and West Tadcaster, the District Council appointed a Committee by whom the questions of the water supply and the sewage disposal for Tadcaster should be first considered.

Dealing here only with the water supply, engineers were invited and a prize of £10 offered for the best scheme suitable for both districts. All of the 7 schemes sent in, proposed to obtain water from the silver spring which was reported to be very hard. One alternative, viz. : to pump water from the river wharfe has been anxiously considered, and endeavours were made to ascertain if a pure and satisfactory supply could be obtained by filtering the water.

Full details of the inquiries made and copies of the Analyses made at intervals during varying conditions of the river were sent to the Local Government Board, who have appointed an Inspector to inquire into the whole subject on the 22nd inst.

Astley.

The hamlet of Astley has been provided with water by an extension of the mains at Bower's Row, 3-inch pipes have been

laid for a distance of 1,170 yards and 40 houses supplied. Smaller extensions have provided for the new houses near the Rows and at Kippax.

The rapid increase of new houses at Crossgates has required 420 yards of new water mains to be laid, and the Council purchased the private main from there to Austhorpe. additional houses have, during the year, obtained a supply from the mains at Allerton, Kippax, Garforth, and Swillington. Crossgates.

After the outbreak of enteric fever at Micklefield, negotiations were made to bring the water from Kippax mains to supply the houses at New and Old Micklefield; unfortunately, terms could not be arranged. An analyses recently made of 2 well waters from Old Micklefield, shows that one of these is not satisfactory and great care will have to be taken in repairing the old closed well to prevent surface and sub-soil water reaching the well, the sub-soil being limestone freely fissured. Micklefield.

The mains from which the colliery houses at New Micklefield are supplied require more frequent slucing for the water is often discoloured. Water from wells is the supply of a large part of the agricultural portions of the district; inquiries as to the condition of these wells are constantly being made, and a more wholesome or suitable supply of water has been obtained by sinking 10 new wells and by cleaning out 33 others.

Of the 18 samples of water, from wells in 7 parishes, analysed, 7 were found to be polluted and not safe to use as for drinking.

SEWERS AND SEWAGE DISPOSAL.

During the past year there are few townships of any size which have not had the condition of the existing sewers inquired into, and where found defective some improvement has been carried out.

The proposed schemes for East and West Tadcaster have been anxiously considered on many occasions by the Committee, by whom the questions of water supply and the sewerage scheme were considered. The Parish Councils for these townships have also considered the scheme submitted to the District Council by engineers, and made a recommendation in favour of one which was submitted by Messrs. Fenwick and Bromet. It is proposed to deal with the sewerage from both districts and to treat it on land on the east side at some distance from the town. Tadcaster.

The completion of a scheme for sewerage and disposing of the sewerage of any township adds a fresh responsibility to the work of the District Council, viz.: that of seeing that the means provided are being worked efficiently. Any neglect on the part of those who have charge of the works, means complaints from the Rivers Board, the Dam Commissioners, or from private individuals. Frequent visits have been made to the works at Kippax, Garforth, Sherburn, and Committees have reported to the Council as to several alterations which were considered necessary to prevent such complaints in the future. Sewage
Grounds.

Many of the sewers which were taken over by the Sanitary Authority in the passing of the Public Health Act of 1875, and those previously maintained by the parish surveyors, had not been laid with the same material or care for a sufficient fall that is now required; hence, many are year by year found to be very defective and require to be taken up. In West Tadcaster the outlet sewer through the church yard has been relaid and 6 ventilating shafts erected; work of a similar kind has been carried out in East Tadcaster, the main sewer in Bridge Street and the river outlets have been cleaned out and efficiently repaired. An escape of coal gas into some parts of the sewers in Tadcaster caused many complaints. Some efforts have been made by making filters and screens to prevent refuse from the breweries being discharged into the sewers.

The building of a large number of new houses at Crossgates makes it an urgent matter to obtain a proper outlet by a new sewer to the sewerage grounds. Cesspools are only permissible when used for isolated houses, but the groups of houses now erected ought to be provided with efficient sewers.

At Allerton-Bywater a portion of the existing sewer has been cleaned out; also at Askham Byan, at Appleton Roebuck, Bilbrough, Ryther, Barwick, Kirk Fenton, at Colton, and South Milford. At Scholes it was decided to extend the outlet sewer 140 yards, and so remove a cause of complaint. Some alterations is wanted to remove complaints of the insufficient means of dealing with the sewage from the Grammar School and houses near at Aberford.

The District Council has arranged with some person in the largest parishes who is paid for flushing out the sewers at stated times, and whenever it is considered necessary; additional ventilators are also provided and more manholes are built. All this work is done to provide better means of carrying away the liquid sewage from houses, and private owners are in turn called upon to provide the necessary drains to connect with these sewers, with the needed protection of careful disconnection of the house drains and efficient gully traps.

Scavenging.

The removal of refuse from middens is as yet carried out through the householders, unless in the townships of Allerton-Bywater and Kippax. In these the work is carried out with an occasional reminder to the contractor in a far more satisfactory way than in other places. At Crossgates, Garforth and Tadcaster some person should be appointed to remove that refuse at stated times and during reasonable hours. 6 persons were convicted and fined at Tadcaster for allowing nightsoil to be deposited in a street for 48 hours, and notices had to be served in order to get 145 closets emptied, they having been neglected until a nuisance was created. The condition and suitable situation of the closets are repeatedly inspected, and when too near either the house or well

their removal is required ; 112 of these were last year newly built or repaired, and 22 of these because they were causing a nuisance.

The Bye-laws which regulate the erection of new houses are in force in the most populous parishes, and the fact that plans for 88 in 7 parishes were passed last year, and that during the same period 100 houses were occupied, shows the need for such Bye-laws. ^{New Houses, &c.}

It was necessary to require 20 houses to be repaired, ventilated, &c., and 5 were closed as being unfit for human habitation.

Inspections have also been made of the sanitary and health conditions of various schools, also workshops; the latter have only few workers in the same room and these have been found in a satisfactory state. ^{Workshops.}

The Inspector reports 143 visits to cowsheds, and that 31 notices were served, requiring these places to be limewashed. ^{Cowsheds.} The milk trade is an important one, but I have not found any case of infectious disease traceable to the milk supply.

Among the 21 canal boats inspected, and on which there were found 46 persons including 11 persons under 12 years of age, there was no case of infectious illness. Considered as dwellings, several of the boats were found not to be clean and also in need of repairs. ^{Canal Boats.}

This report is longer than previous ones, but my excuse must be that the work has increased, and I believe both members of the Council and the ratepayers generally will be interested in the summary of the work which is carried out in the hope of protecting the public health, and the early part of the report will shew that the work is being followed by good results.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON, M.D.,

Dip. Public Health, Cambs.,

MEDICAL OFFICER OF HEALTH.

TADCASTER, 11th January, 1897.

TABLE SHEWING PARTICULARS OF NUISANCES ABATED AND SANITARY
WORK DONE DURING 1896.

Number of inspections made during the year—nuisances...	1,165
Number of Inspections of New Buildings	253
" " Cow Sheds	145
" " Lodging Houses by night and day	16
" " Slaughter Houses	8
Nuisances found requiring abating	379
Notices served by Inspector	486
Number of Notices served from the Rural Sanitary Authority	73
New Drains laid yards	3,350
House Drains disconnected	88
New Trapped Gullies provided and Fixed	204
Old do. do. cleansed and repaired	599
Old Drains cleansed and repaired yards	1,541
Open Drains and Water Courses cleansed yards	6,316
New Privies, Ashpits, and Earth Closets built	33
Old do. do. repaired	57
Do. do. do. removed	22
New Water Closets and old ones repaired and ventilated...	8
Privies and Ashpits cleansed out after notice	145
Cesspools, new	19
Do. old, cleansed or removed	43
Houses whitewashed and cleansed	12
Do. disinfected after Zymotic Disease	87
Do. overcrowding abated... ..	7
Do. repaired and ventilated	20
Do. closed as unfit for occupation	5
Pigstyes removed from against dwelling houses	38
Manure heaps removed, found to be a nuisance	15
New Wells sunk and new Pumps fixed	10
Wells cleansed and Pumps repaired... ..	33
Rain Water Tanks made and repaired	6
Cowsheds and Dairies altered	2
Do. do. whitewashed after notice	31
Plans passed for New Houses	91
Plans passed for other buildings and new street	31
New Houses occupied... ..	101
Canal Boats inspected... ..	21
Do. requiring painting, cleaning, or repairs	10
Do. without registration certificate... ..	3
Urinals provided for licensed houses	9
Other Nuisances abated	43

HODGSON DENHAM, *Inspector and Surveyor.*

(A)

TABLE I.

TABLE OF DEATHS during the year 1896, in the Rural Sanitary District of Tadcaster, classified to Diseases, Ages, and Localities.

Mortality from all causes at subjoined ages.										Mortality from subjoined causes, distinguishing deaths of Children under Five years of age.																											
NAMES OF LOCALITIES. adopted for the purpose of these Statistics ; pub- lic Institutions being shown as separate locali- ties.	(a)	(b) At all ages.	(c) Under 1 year	(d) 1 and under 5.	(e) 5 and under 15.	(f) 15 and under 25.	(g) 25 and under 65.	(h) 65 and upwards.	(i)	FEVERS.																											
										Smallpox.	Scarlatina.	Diphtheria.	Membranous Group	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera	Erysipelas.	Measles.	Whooping Cough	Diarrhoea and Dysentery.	Rheumatic Fever	Influenza.	Pththisis.	Bronchitis, and Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases	Total.						
ABERFORD (Sub-registration district)	...	316	74	29	14	36	98	65	Under 5 5 upwards	...	1	...	2	...	...	6	...	...	1	...	1	14	...	7	...	...	...	...	...	1	19	...	1	56	103		
APPLETON ROEBUCK (Sub-registration district)	...	88	20	11	5	3	16	33	Under 5 5 upwards	...	...	...	...	...	...	1	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	5	5	...	1	32	57
TADCASTER (Sub-registration district)	...	67	22	6	2	1	13	23	Under 5 5 upwards	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	2	...	...	...	...	...	...	4	7	...	...	22	28
WORKHOUSE	16	.....	....	...	1	8	7	Under 5 5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	10	16
Totals	...	487	116	46	21	41	135	128	Under 5 5 upwards.	...	2	...	2	...	...	7	...	...	1	...	1	14	1	9	...	...	...	...	...	...	2	28	...	1	102	162	
											1	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	6	33	34	70	133	325	

(B)

TABLE II.

TABLE of POPULATION, BIRTHS, and of NEW CASES of INFECTIOUS SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Rural Sanitary District of TADCASTER; classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Population at all ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.											*Cases Removed.			
	Census, 1891.	1896.			FEVERS.														
					Smallpox.	Scarlatina.	Diphtheria.	Membraneous Croup	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.		Scarlet Fever.	Enteric Fever.	
ABERFORD (Sub-registration district)	15,920	17,086	590	Under 5 upwards	.....	14	.....	2	.....	31	2	.....	2	.....	2	.....	13	7	.....
TADCASTER (H) (Sub-registration district)	4,553	4,776	142	Under 5 upwards	.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	1	2	.....
APPLETON ROEBUCK ... (Sub-registration district)	5,504	5,568	124	Under 5 upwards	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
THE WORKHOUSE ... ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Totals	25,977	27,430	856	Under 5 upwards	.....	14	1	2	.....	34	2	.....	2	.....	2	2	15	7	.....
					.....	42	3	.....	.....	.....	1	.....	.....	.....	.....	.....	26	18	.....

Notification of Infectious Disease is compulsory in the district since 1st December, 1890.
Hospital provided in the Parish of Garforth.

* Number of such Cases Removed from their Homes in the several Localities for Treatment in Isolation Hospital.

TABLE III.
STATISTICS FOR THE RURAL SANITARY DISTRICT AND THE REGISTRATION
SUB-DISTRICTS, 1896.

UNION AND SUB-DISTRICTS.	Population in 1896.	RATE PER 1,000 OF THE POPULATION.				Deaths under 1 to every 1,000 Births Registered.
		Births.	Deaths.	From Zymotic Diseases.	From Respiratory Diseases.	
Rural Sanitary District ...	27,430	31·2	17·7	1·4	2·2	135
Aberford	17,086	34·5	18·4	1·9	2·2	125
Appleton Roebuck ...	5,568	22·2	15·8	0·7	1·9	161
Tadcaster	4,776	29·7	17·2	0·8	2·3	154

TABLE IV.

BIRTH AND DEATH RATES IN THE LARGEST TOWNSHIPS DURING 1896.

PARISHES.	ESTIMATED POPULATION 1896.	RATES PER 1000 OF THE AVERAGE POPULATION.				Deaths under 1 year per 1000 Births.
		Births.	Deaths.	Zymotic Diseases.	Respiratory Diseases.	
Allerton-Bywater, Township of	2535	51·6	22·4	5·1	3·5	160
Barwick, ”	2553	25·0	10·5	0·7	3·1	111
Garforth, ”	2755	34·8	18·1	2·5	5·0	156
Kippax, ”	2934	38·1	18·0	2·7	3·4	142
Micklefield ”	1228	26·0	60·2	0·0	3·2	31
Great and Little Preston ,	1706	35·0	15·2	1·7	4·1	183
Sherburn ”	1883	21·7	14·8	0·0	2·1	146
South Milford ”	1104	28·0	9·1	0·9	0·0	96
Tadcaster ”	2930	31·7	15·0	0·6	4·0	118
Swillington ”	912	27·4	7·6	0·0	5·4	80

BALBY AND HEXTHORPE

URBAN DISTRICT COUNCIL.



ANNUAL REPORT

OF THE

Medical Officer of Health.

Population in 1891	4,270
Ditto estimated 1896	5,300
Area in acres	1,613

To the Balby and Hexthorpe Urban District Council.

GENTLEMEN,

It is required from the Medical Officer of Health that he shall, as soon as possible, after the 31st December in each year, present a report upon the health of the district, as evidenced by the returns of births and deaths, and by the number of cases of infectious diseases reported. The report has also to contain particulars of the sanitary questions considered, and the works carried out, which are likely to improve the sanitary conditions of the district. Copies of this report have to be sent to the Local Government Board and the County Council. Although the Council only came into existence in April, 1896, yet, for the sake of completeness, I have in this report dealt with all matters for the complete 12 months, ending 31st December last. The area of the district is 1,613 acres, the larger half of which is in Balby parish, while rather more than half of the population reside in the smaller Hexthorpe portion.

Description
of District.

Balby is divided from Hexthorpe nearly, if not quite accurately, by the Doncaster branch of the Manchester, Sheffield, and Lincolnshire Railway. The geological formation of the two parts is widely different. In Balby the main road from Doncaster to Sheffield is on a ridge, on the south side of which the subsoil for a considerable depth consists of red sand, while on the north, or Hexthorpe side, the subsoil consists of the upper loosely bedded layers of the magnesian limestone.

The water obtained from the wells therefore differs considerably in the two portions of the district.

The highest point in the district is 105 feet above sea level, and from the central ridge the land quickly slopes downwards on the south side, where a wide area of low-lying undrained land occurs, which is only 19 feet above the sea level.

The North, or Hexthorpe side, has a more level surface. A very large proportion of the inhabitants in Balby and Hexthorpe are employed at the large engineering works of the Great Northern Railway Company at Doncaster, or by one of the several railway companies which centre in Doncaster. In the district there are a large brass and iron foundry, several waggon works, and three brick yards, in which a considerable number of the inhabitants are employed. The population are, therefore, mainly mechanics, but Balby also contains a considerable number of suburban villas occupied by those engaged in business in Doncaster. The population has increased very rapidly during the last 20 years.

Population.

In 1871 the population was 2038.

1881 it had increased to 3422.

1891 ,, ,, ,, 4270.

Based upon the many new houses built and occupied since the census was taken in 1891, I estimate that up to the middle of last year the population equalled 5,300.

The birth and death rates during the 10 years, 1881-90, showed that the average for these years was as follows.

For comparison I also add the average for the next five years :—

	Rates per 1,000 of the Population.			
	Births.	Deaths.		
		From all causes.	From Zymotic Diseases.	From Diseases of the Lungs.
Average for the 10 years 1881-90	39·9	18·0	2·6	4·1
5 years 1891-95	38·6	16·9	2·9	3·2

During 1896, 190 births were registered,—males 105, females 85; the birth-rate was 36·0 per 1,000. The reduced rate as compared with the average of previous years rather points to an over estimate of the population having been made. Birth and Death Rates

68 deaths were registered in the district last year,—males 34, females 34. Four of these were patients who had been brought out of the rural districts to the fever hospital at Balby; these cases are deducted. At the Workhouse, and at the Infirmary in Doncaster, five deaths of people belonging to Balby were registered; these are added, and the corrected number 69 is equal to a death-rate for the year of 13 per 1,000. That rate is considerably under the average of previous years.

From what is known as the zymotic group of diseases, including deaths from fevers, &c., there were 10 deaths. These included 5 deaths due to whooping cough, 3 to scarlet fever, and 2 to diarrhœa; the rate from these was just under 2 per 1,000.

Another group specially noted are those caused by diseases of the lungs; there were 13 deaths. Four were caused by phthisis or consumption, and nine from bronchitis, &c.; the death-rate from these was 2·4 per 1,000, which was also under the usual average.

Infants under one year died in the proportion of 142 to every 1,000 births registered during the year, while deaths Deaths at different Ages

among children under 5 years of age were more than half the total number (viz., 56 per cent.). It will be at once seen how excessive is the proportion of these deaths when compared with the number of children under that age in the whole population.

Twenty-three per cent. of those who died last year had lived to, or beyond, the age of 65 years. I see that four deaths of persons,—aged 1 month, 52 years, 38 years, and 83 years,—were not certified by a doctor, or by the coroner. It looks strange if no medical aid was asked for before these deaths occurred.

Cases of
Infectious
Diseases
notified.

The Notification of Infectious Diseases Act had been in force in Balby and Hexthorpe as part of the rural district since 1890; on the formation of the separate district the Act was not re-adopted until the 14th September. In the interval between April and September I continued to receive notifications from the medical men practising in the district, and therefore am in a position to give a complete return of the cases of infectious disease during the whole year.

The number of these reported to me was 63 :—

51	were	cases	of	scarlet	fever	
3	„	„	„	diphtheria		
2	„	„	„	membranous	croup	
6	„	„	„	erysipelas		
1	was	a	case	of	enteric	fever

Scarlet
Fever.

Among the 51 cases of scarlet fever there were 3 deaths, which is a high percentage among those attacked. The disease was prevalent in the districts throughout the year, but especially so during the months of January, February, May, and June. Until the month of April the hospital of the Rural District Council was not ready to receive patients, and therefore all the cases had to be treated at their own homes. Second and even third and fourth cases of fever occurred at seven houses, as no sufficient means of isolating the patients was possible, therefore one-half of all the cases broke out in nine houses. There is also little doubt but that the infection was kept up through the

prevalence of the same disease in the town of Doncaster.

In the month of May it was found urgent to remove 3 children from one house to the hospital of the rural authority; since then 6 additional cases have been treated in the hospital, and all of these recovered. The expense of these cases being removed for treatment to the hospital of the Doncaster Corporation or of the Rural District Council is rather heavy, but there is every reason to show that the action prevents the spread of the disease, all the patients recovered.

Only one case of typhoid fever was reported; the water supply at the house was found not to be satisfactory, but there was no history of the introduction of the infection.

There were 3 cases of diphtheria, all in adults who lived wide apart from each other, and there was no history of any direct cause; the history of each was more like a severe cold, with throat symptoms. **Diphtheria.**

The 2 cases of membranous croup in children were cases of illness, beginning while away from Balby. 6 cases of erysipelas were reported, but these cases are of little general importance as regards infecting others.

This report would be very incomplete in giving an account of the Sanitary condition of the district to-day without noting what measures had been previously taken to protect the health of the inhabitants.

In 1880 the then special drainage district of Hexthorpe was drained throughout, the sewage being conveyed to the sewers of the Doncaster Corporation at the Borough boundary. A charge is made for the treatment of this portion of the Sewage. In 1886 the lower half of St. John's Road in Balby was drained in the same direction, as that portion was too low to be carried to the Balby outlet. In the Hexthorpe district a subsoil drain conveys the rain and road water to an old water course. **Sanitary Work carried out before 1896.**

Balby is sewered throughout. The sewage from the higher portions flows by gravitation to the farm, that portion was completed in 1884. In the following year a sewer was **Sewers and Sewage Disposal.**

completed for the lower portions of Balby ; on the South side the sewage is raised to the same farm, which is 11 acres in extent, and is now let to a tenant to farm. The servants of the Council have, however, the sole control for distributing the sewage over the land. Just before this Council took charge of the farm it had been thoroughly overhauled, and considerable improvements made in the arrangements for pumping the sewage by the Rural District Council.

**Water
Supply.**

In 1881, houses in the Balby and Hexthorpe districts were first supplied with water from the mains of the Doncaster Corporation. Year by year the number of houses so supplied is increasing, 64 new connections were made in 1896. The water yielded by the local wells is not quite satisfactory for ordinary domestic use. Four such well waters were analysed last year, and neither of them could be sanctioned as useable, and 33 of the wells were closed.

Bye Laws.

In 1882 Urban powers for regulating new streets and buildings, nuisances, &c., were granted for Balby and Hexthorpe, so that the newer houses have been built in conformity with the bye-laws which were afterwards made. During the last 9 months plans have been passed for 52 houses.

**Scavenging
of House
Refuse.**

In 1891 the removal of refuse from closets and ash-pits in Hexthorpe was for the first time let to a contractor. Similar work is now carried out in the whole district by contract. Once in three months all refuse is removed in regular rotation of streets and houses, and in addition there is a monthly collection of house refuse by a bell cart.

**Unhealthy
Houses.**

Since the Council was formed the Sanitary state of the district has been considered and reported upon to the Sanitary Committee, and some particulars of the nuisances abated are given in a list prepared by the Surveyor and Inspector. A group of 20 houses were so much complained of that a special report was made regarding them, and the Council ordered notices to be served under the Housing of the Working Classes Act. Several of the streets, both in Balby and Hexthorpe, have not yet been properly made, and are, therefore, at times very wet and not drained. The Council propose to consider this question at an early date.

There are 33 cow sheds and dairies registered. There are no offensive trades carried on, and all meat sold is slaughtered in Doncaster. There are only two bakehouses, and no other workshops are registered.

Inspections have been made of all the Sanitary details of several groups of buildings, and it will be desirable to pre-serve a record of the house to house survey of the whole district for future reference.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON, M.D.

Medical Officer of Health.

Balby, 20th January, 1897.

***List of Works Completed and Nuisances Abated
in 1896.***

Inspections made...	...	...	...	...	73
Nuisances found	...	...	...	...	27
Notices served to abate nuisances	...	...	...	...	27
New sewers laid—50 yards 12 inches.					
Sewers relaid—21 yards 12 inches; 210 yards of Surface Drains.					
Defective house drains relaid	...	...	...	...	22
Gullies fixed instead of iron traps	...	...	...	...	15
Water closets repaired	...	...	...	...	2
Privy and ashpit do.	...	...	...	...	1
Houses condemned as unfit for habitation	...	...	...	...	20
Wells closed, water not being wholesome	...	...	...	...	3
No. of houses supplied with water from the					
Doncaster water mains in 1896	...	...	...	...	66
Cowsheds and dairies registered	...	...	...	...	33
Bakehouses	do.	...	...	...	2
Plans passed for new houses in 12 months	...	...	...	...	71
„ „ „ other buildings	...	...	...	...	2

G. GLEDHILL,

Surveyor and Inspector.

(A) Table of DEATHS during the Year 1896 in the BALBY & HEXTHORPE URBAN DISTRICT, classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities	Mortality from all causes, at subjoined ages.							Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.																						
	At all ages.	Under one year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.						Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phtthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All Other Diseases.	TOTAL.	
												Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.														
Balby and Hexthorpe Sub-District	64	27	11	5	1	416	Under 5	..	3	..	..	..	..	..	..	..	..	..	..	5	2	..	..	..	7	..	..	24	38
The Fever Hospital..	4	..	..	..	..	4	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	4	..	12	26
Totals.....	68	27	11	5	1	816	Under 5	..	3	4	5	2	5	7	24	38
							5 upwds.	4	30

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring outside the district among persons belonging thereto.	5	.....	..	1	2	2	..	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	2	5
Deaths occurring within the district among persons not belonging thereto.	4	.....	..	..	..	4	..	Under 5	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4..

(B) Table of POPULATION, BIRTHS, and of NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the BALBY and HEXTHORPE URBAN DISTRICT; classified according to DISEASES, AGES, and LOCALITIES.

NAME OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Population at all Ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each locality, coming to the knowledge of the Medical Officer of Health.										Number of such Cases removed from their Homes in the several localities for treatment in the Isolation Hospital.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Census 1891.	Estimated to middle of 1895.			Fevers.						Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.						Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
					Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.					Erysipelas.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.					Cholera.	Erysipelas.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Balby and Hexthorpe Sub-District	4270	5300	190	Under 5 upwds.	.. 43	8 .. 3	1	1	..	1	6	..	2

The “Notification of Infectious Disease” is compulsory in the District since the 14th September, 1896. Carr House, in the township of Carr House and Elmfield. The Balby Fever Hospital, the property of the Doncaster Rural District Council.